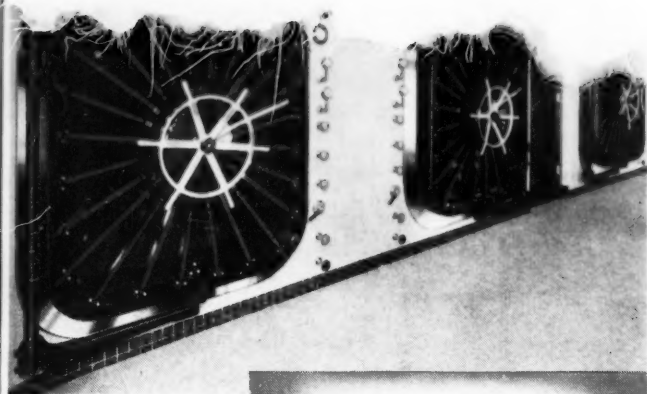


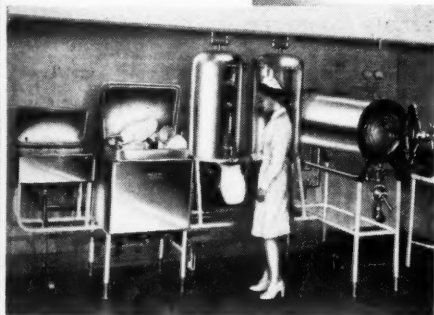
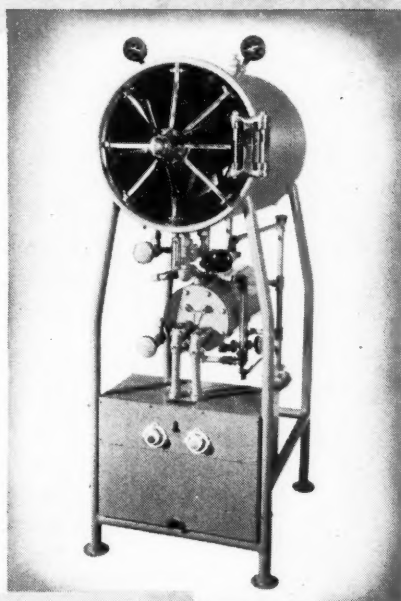
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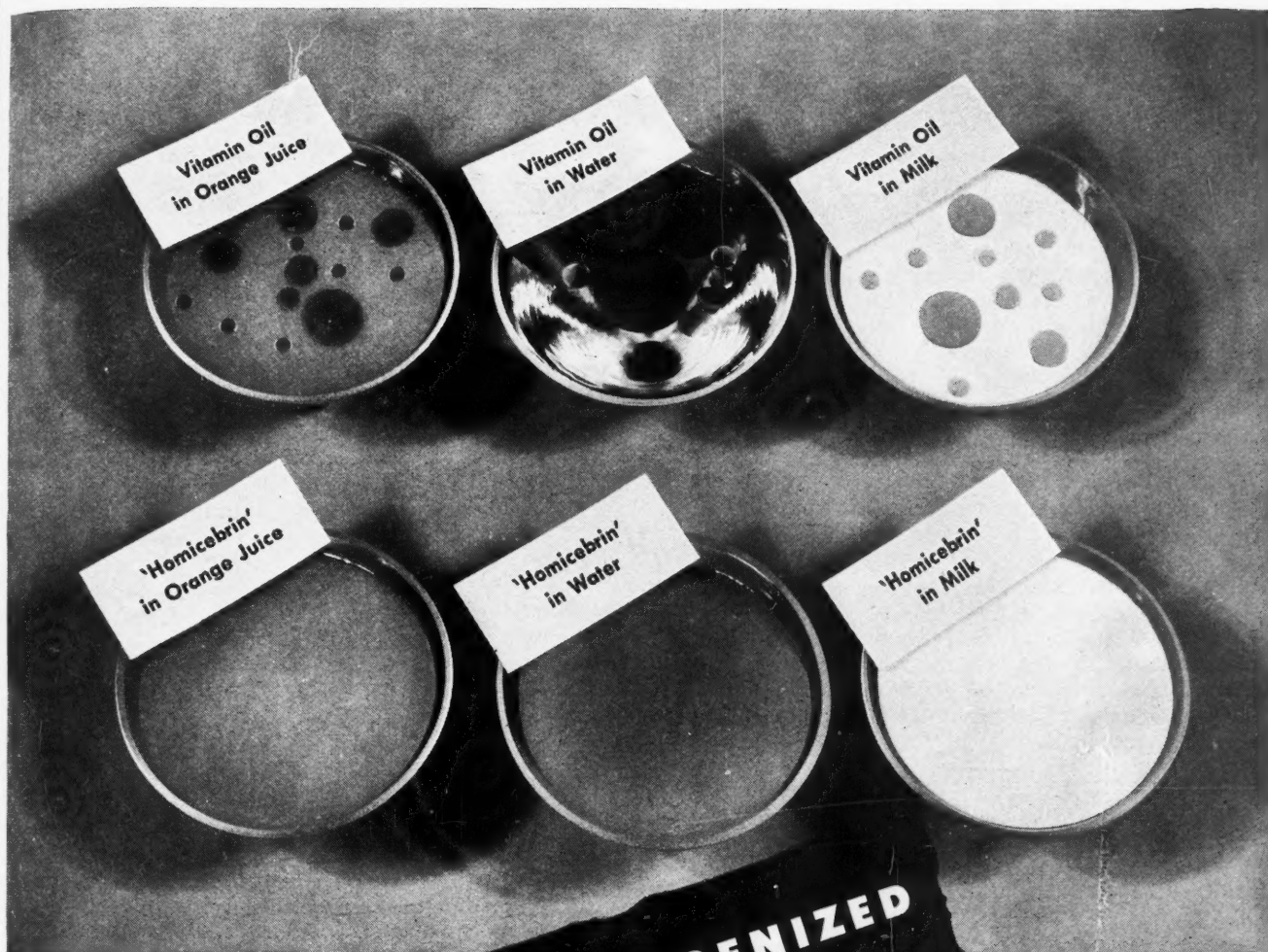
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## THE ROVING REPORTER

### For Better Board Members

Perhaps you have heard about the institutes that Children's Hospital, Denver, conducts for board members. These are held annually and are designed to instruct board members, particularly the new ones, regarding the management, physical setup and equipment of the institution.

This hospital was founded by women and still has an all-women board. Men do participate in hospital responsibilities, however, as there is a men's advisory committee, a men's advisory investment committee and a men's advisory real estate committee.

Came the war years with all the increased activities of the women board members and there wasn't time for the regular institute. So last year the institute was compressed into an intensive two day program. The first morning was given over to instructions for all

the members of the board and a visit to Boettcher School, the handsome new public school for handicapped children which is connected to Children's Hospital by tunnel.

After luncheon the board attended the regular pathological conference of the medical staff. The second day's program was for new board members only at which time the entire organization and management of the hospital were explained.

So successful was this short course that the plan will probably be followed until the war ends, at least.

### Patients Publish Their Views

Patients at Norwich State Hospital, Norwich, Conn., are now putting out a paper of educational and news interest. It is circulated among the wards and is sponsored by the occupational therapy department. The project gives many

patients a chance to express themselves since cover, illustrations, articles and puzzles are contributed.

A patient named the paper the *Signal* and it is dedicated to the tribe of Mohegan Indians who helped and befriended the early settlers of Norwich.

### They "Talk it Out"

The Ward 11 Club meets on Wednesday afternoons. It convenes in one of the "dorms" and some of the members must perch on the edge of beds but it is a club with a future and some day soon may have a comfortably furnished lounge.

Those invited to membership in the Ward 11 Club are selected patients at Camarillo State Hospital, Camarillo, Calif. Club discussions are a form of group therapy. Members tell of their strange delusions; other members laugh or listen with absorbed interest. By comparing illness and experiences the patients feel release from tensions.

Some members tell Dr. Benjamin Jacobs, who conducts club discussions, that their first real feeling of well-being has come after one of these club meetings.

Dr. Judith Garber, also on the staff, has used the same technic with success with women patients and it is used at other psychiatric centers. Some such clubs give plays in which patients set forth their complexes and thus relieve their tensions, the term for this device being "psychodramatics."

Another new club at Camarillo is a branch of Alcoholics Anonymous, which meets the fourth Sunday afternoon of each month. All members are former alcoholics and they help themselves by helping others. At the first meeting last September only women showed up but by the next month the men turned out in full force.

### Say It With Waffles

Any encouragement that can be given good attendants in a mental disease hospital should certainly be extended for these workers are becoming increasingly hard to find.

Ward D at Camarillo State Hospital in California is a women's ward and the attendants there, under the able supervision of Mrs. M. Salzman, have succeeded in making it a model ward as far as neatness and attractiveness are concerned. Such a happy state of affairs has not gone unnoticed or unrewarded.

No, the girls didn't get a bonus or half day off; that wasn't to be expected. What they did get was a mid-morning

### They Like "Light" Books

This homemade book truck will not make the rounds much longer in the Army hospital at Camp Van Dorn, Miss. The library on wheels has proved so popular that a custom-built book truck has been put on order.

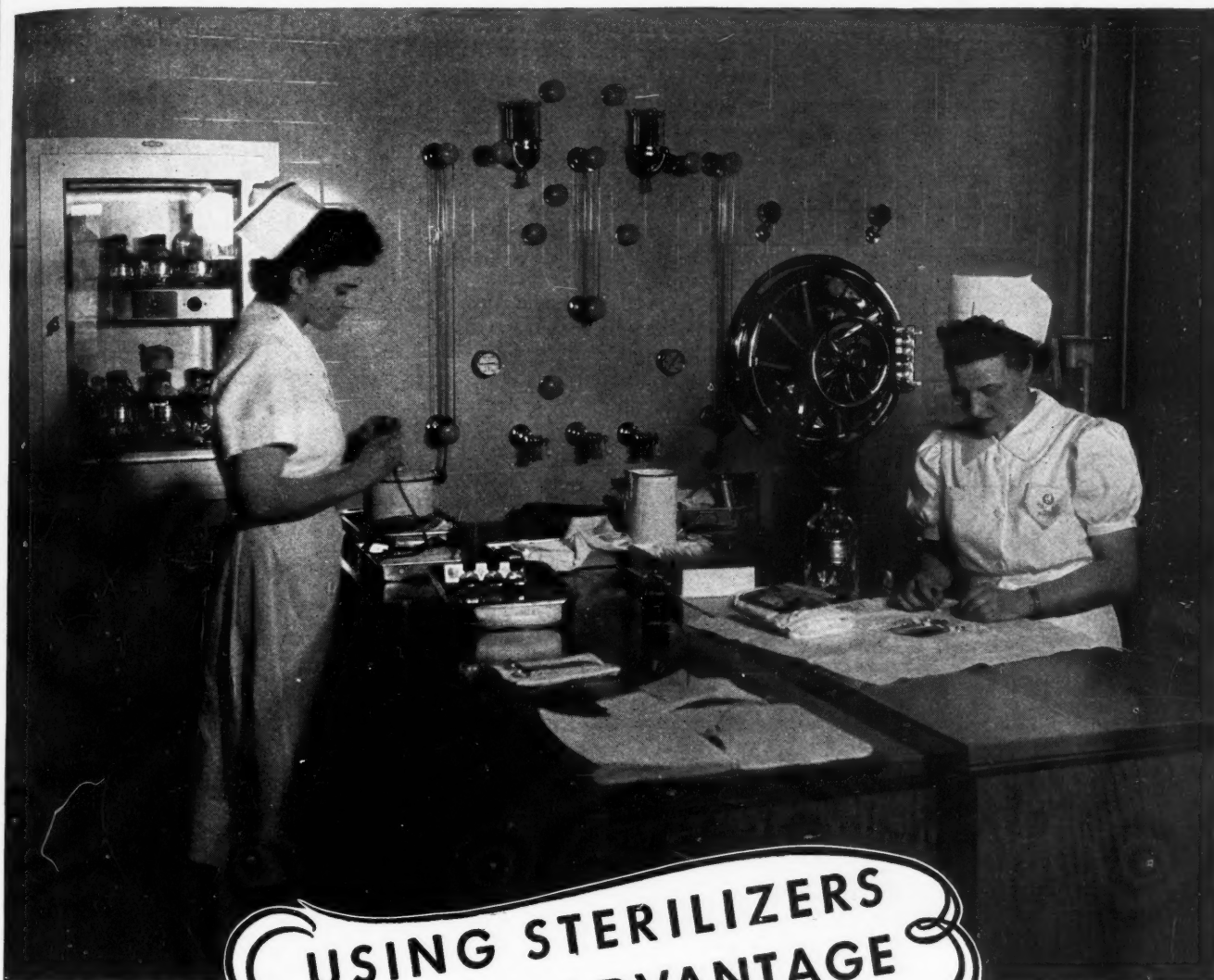
The camp has a library of 4500 volumes, including the Army's overseas editions of popular books. These small paper bound reprints are liked not merely for subject matter but because they are easy to hold in bed.

Mrs. Martha Schaaf, hospital librarian, says the men in pajamas ask chiefly for best sellers because they want to make up for what they've missed. Biographies are popular with soldier patients as are cartoon and humorous books, fiction, mysteries, poetry and travel. Bob Hope's "I Never Left Home" is a great favorite.

Civilian hospitals could well make more use of paper bound volumes and undoubtedly will when an improvement in the paper situation permits bigger editions of the reprints.







## USING STERILIZERS TO BEST ADVANTAGE

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*Above: Central service room at St. Joseph's Hospital, Elgin, Illinois, equipped with Scanlan-Morris autoclave, pressure water sterilizers, and solution warming cabinet.*

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waffle spread, served to groups of six each morning until all had been shown the appreciation felt.

Golden brown waffles, plenty of butter, a sea of maple sirup and excellent coffee to go with them—these have assured Mrs. Salzman that Ward D will maintain its reputation.

### Friday Is Book Day

Friday is one of the most interesting days at Mahaska Hospital, Oskaloosa, Iowa, for that is the day that Mrs. Mary Frush, the charming assistant librarian of the Oskaloosa Public Library, comes around with the books.

This hospital has no women's auxiliary to run its book service but N. Blanche Culbertson, the superintendent, feels that the public library hospital service is as satisfactory a service as could be devised.

The library service at Mahaska started when a donor left a fund to provide books for the hospital. In the broad corridor just inside the front entrance were two wall niches and the hospital's skillful engineer, Don Mattix, converted these into recessed bookcases that add much to the decorative interest of the building, the bright jacket covers and book bindings bringing a strong color note into the corridor.

Each Friday morning Mrs. Frush comes from the public library with last week's order placed by patients and these supplemented by the hospital's own book list give ample choice to patients of different literary tastes and personalities.

### A Handy Man to Have Around

A handy engineer or carpenter is a hospital's most appreciated employee. Don Mattix at Mahaska Hospital, Oskaloosa, can turn his hand to cabinet work and thus the hospital gets custom-built equipment that it could not afford to purchase from the manufacturer.

The darkroom in the x-ray department at Mahaska is a Mattix job. He built in the cupboards above the counter and the cabinets below. The counter, too, is his work, it being covered with linoleum so treated that it is acidproof. He built a rack for the films above the counter and below is a bin to hold films. The bin tips out of the cabinet and consists of a series of vertical divisions that are graduated in length so that films of varying sizes can be accommodated and easily removed.

### Especially for "Specials"

Accommodations for special nurses are much appreciated. Mahaska Hospital has a room on the ground floor where these nurses may come to rest at stated periods, for all nurses work a split shift. There are two cots in the room, an ironing board for pressing uniforms and a wash basin for freshening up. Don't think this room is not appreciated.

### Food Service for Friends

One corner of the staff dining room at Mahaska Hospital is shut off by screens and contains two tables for guests. The hospital is located some distance from any restaurant and it is necessary to make some provision for meal service. Breakfasts are 30 cents, dinners, 60 cents and suppers, 50 cents. No extras are served. Sandwiches are not available. Unless the guests appear at regular meal times no service is given. Thus, with a minimum of effort, the hospital provides an essential service to the patients' relatives.

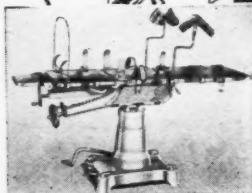
### Part-Time Employees Help

Widows or divorcees of middle age are a partial solution to the hospital employment problem, in the experience of Mrs. Cora Murray of Jefferson County Hospital, Fairfield, Iowa.

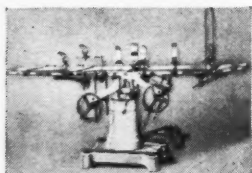
Many of these women are not interested in war jobs as their entire attention has been given to the home. Now that they need work outside the home they prefer the security that hospital work promises over war work; they like the friendly atmosphere of the nurses' resi-

## PLAN YOUR OPERATING ROOM AS A UNIT

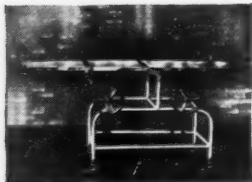
### Shampaine OPERATING TABLES OPERATING LIGHTS



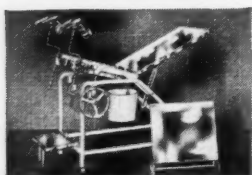
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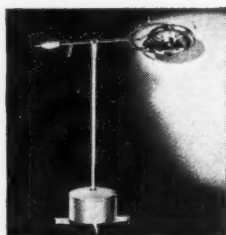
S-1523  
Universal Operating Table



S-1548  
Morgan Urological Table



S-1586  
Major Operating Light

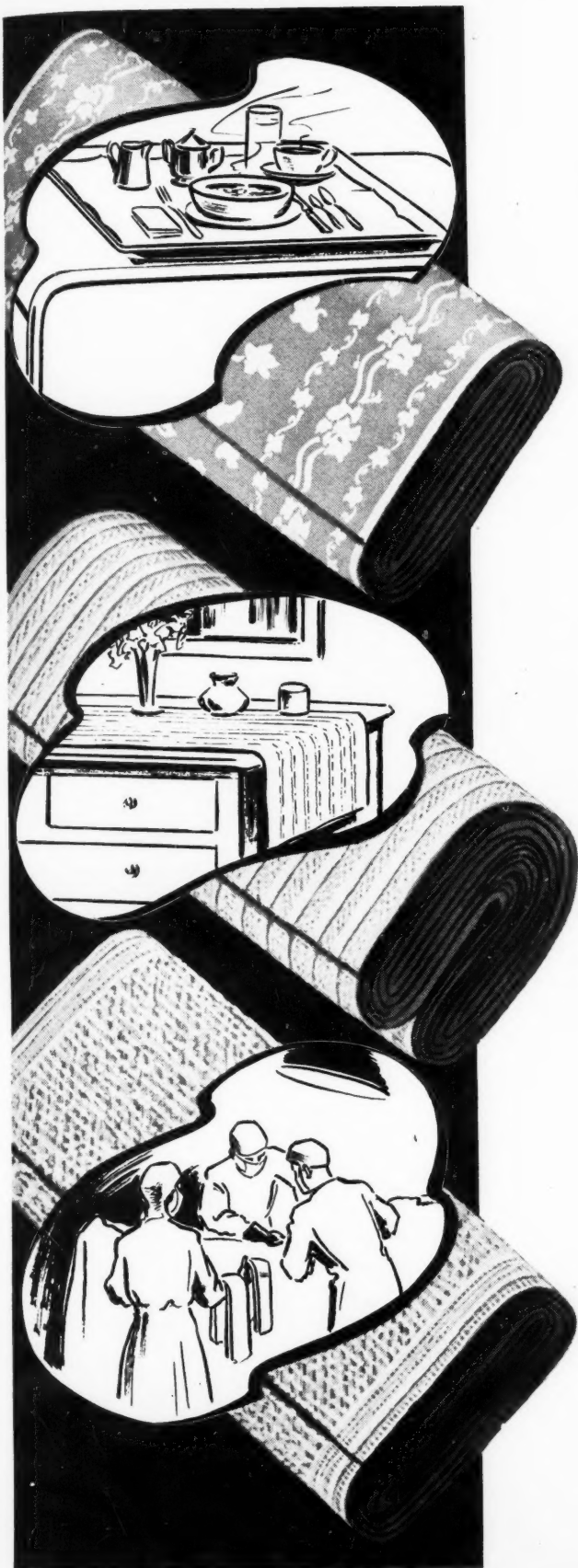


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dence where they may settle in with a few objects from their own former homes and they think the pay of \$3 a day with meals and rooms furnished and with the privilege of doing their own washing and ironing a fair wage.

These women know that when they fall ill the hospital will take care of them free of charge and that they will get two weeks' vacation with pay. They are required to furnish their own uniforms.

### Lesson in Safety

High school pupils at Punxsutawney, Pa., will be more cautious both as drivers

and as pedestrians since a certain assembly program heard last fall.

Louis C. Trimble, superintendent of Adrian Hospital at Punxsutawney, brought the hospital's specialist in traumatic wounds and the superintendent of nurses to the school for the program and Lt. Jackson Dodson of the Pennsylvania State Police was accompanied by two husky sergeants and a corporal of police.

The real headlines of the program, however, were seven accident victims who told in harrowing detail of their injuries, how they were received and how they might have been avoided. Following these firsthand accounts, the

audience saw a motion picture on careful driving. It was an interested and sober-faced group that watched the program.

### Take a Tip From Patients

Many a superintendent or doctor has learned more about hospital life from occupying a hospital bed than from several days or months in the front office or making house rounds.

A patient knows what he likes and what he dislikes about the service. Like many institutions, Rochester General Hospital, Rochester, N. Y., distributes questionnaires to patients before discharge asking for their comments. Although highly pleased over the fact that 99 per cent of the patients express complete satisfaction over the service given them, the hospital administration does not fail to weigh carefully the criticisms of the remaining 1 per cent. Moreover, it often acts in conformity with patients' suggestions.

Take the maternity patient's reaction to the book on infant care, given to all new mothers on the day of discharge.

"There will be so much confusion for several days after I get home with Jimmy that I won't have time to read it, I fear," this young mother wrote. "If I could have had the book several days ago I would have had plenty of time to read and digest it."

The hospital took this tip and now gives out the booklets a few days in advance.

Another patient expressed annoyance at the click emitted every sixty seconds by the self-regulating clock in the corridor. It bothered her at night. The clock has now been mounted on a sound-absorbing panel.

The hospital is now testing out another suggestion that a board be provided for use on the arms of the chair so that a patient who is allowed to sit up to eat can rest the tray on the board.

### Broadcast Health Information

A little survey nobody has ever made concerns the use hospitals make of house radio systems in public education. Edna H. Nelson, superintendent of Women's and Children's Hospital, Chicago, believes that administrators are passing up a good bet when they fail to broadcast an occasional lecture on a health or hospital subject to the patient's bedside.

"Hospitalization increases the receptiveness of individuals toward such information," Mrs. Nelson contends. "This possibility should not be overlooked when new hospitals, no matter how small, are being planned."

Mrs. Nelson also points out the obvious but not always executed idea that every nurse has it in her power to become a health missionary as she performs her daily care of the patient.

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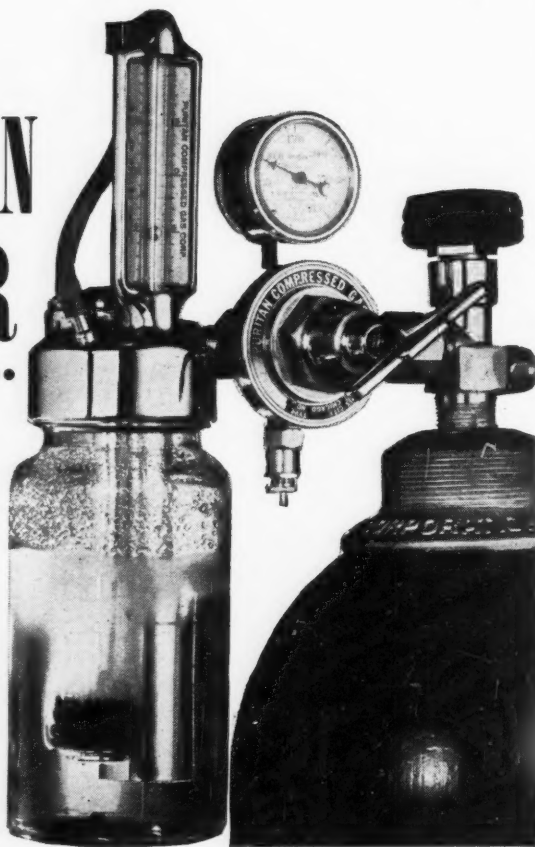
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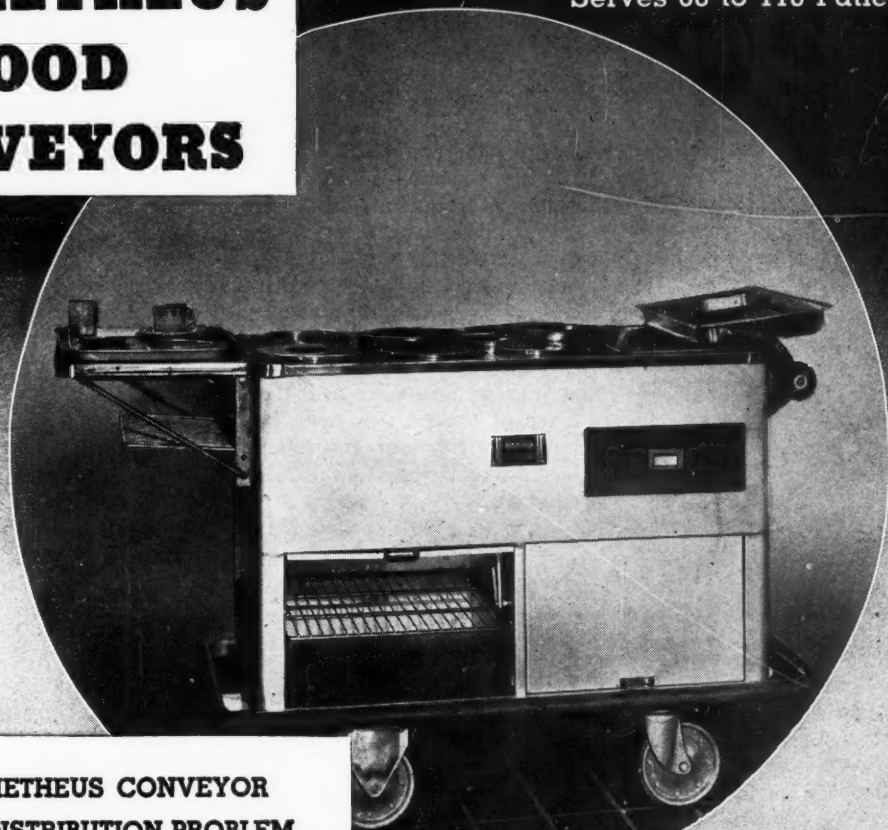
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## READER OPINION

### Transition Period

Sirs:

This will acknowledge your request for information regarding probable action for the protection of hospitals during the "transition period."

It is not possible at this time to forecast in detail the future action of the War Production Board in this respect. Such action will be governed by the general supply situation at that time. You may be sure, however, that full consideration will be given to such problems as may arise in your field. The importance of the smooth operation of hospitals and various institutions to the health and welfare of the nation is recognized.

W. Y. Elliott  
Vice Chairman  
for Civilian Requirements

War Production Board  
Washington, D. C.

### Postwar Materials

Sirs:

We should drop the thought of pre-war construction materials and think of modern postwar materials as we do not want to go back to conditions previous to the war. We are looking forward to many new developments that will bring beauty as well as efficiency into hospital administration and nursing care.

Albert G. Hahn  
Administrator

Protestant Deaconess Hospital  
Evansville, Ind.

### More Drying Space

Sirs:

In the November issue of *The Modern Hospital* under Small Hospital Questions, I wonder whether all the readers were satisfied with the answer given under the question entitled "Space for Drying."

If the 30 bed hospital in question was in any way planned like our 50 bed hospital, or the majority of hospitals that I have seen, it is probably sorely in need of additional space for storage and the service departments. The questioner relates that they are giving up two rooms 18 by 20 feet. The indirect costs that could be allocated to this space undoubtedly far exceed the investment costs of a laundry tumbler, which would take less than 5 square feet.

Aside from the space factor, there would be an enormous saving of time in the operation of the laundry with such a piece of equipment as the tumbler. In addition, I believe there would be a tremendous reduction in the labor re-

quired by the present process of hanging and taking down the laundry.

I wonder whether Mr. Page should not have recommended the purchase of a laundry tumbler. Even if the institution does not have a steam plant, individually gas-fired units are available.

L. M. Barron  
Director

Allerton Hospital  
Brookline, Mass.

### How Make It Pay?

Sirs:

Your contest should project some worth-while thoughts regarding the extent of services to be offered in a 40 bed hospital. I assume it is to be the only institution in the community. If so, there would be few doctors.

How to make a 40 bed hospital pay would be of interest. What services should and should it not offer or attempt to offer in the best interest of the patient? Should it not include a good efficient ambulance service to enable it to transfer patients quickly to larger centers? If there are only three or four doctors, how can they support a hospital of 40 beds?

Is there not danger to the patient in having too many 40 bed hospitals? Would it not be better to have good 15 bed hospitals, limiting their work and quickly transferring the more serious cases requiring the services of medical and technical specialists? I just wonder.

Nels E. Hanshus  
Manager

Luther Hospital  
Eau Claire, Wis.

*In the hospital organization of the future there doubtless will be 10 to 20 bed "outpost" hospitals that will be affiliated with hospitals of 40 to 100 beds that serve as regional centers. They, in turn, should be affiliated with larger general hospitals, preferably institutions connected with medical schools. Patients should be taken to the better equipped centers or specialists from the centers should be called out to the patient, whichever arrangement is more efficient.*

*A rural hospital usually provides beds at the rate of not over two beds per thousand. At this rate a 40 bed hospital would serve about 20,000 people. If there is a physician for every 1500 people in the area, there would be 13 physicians, which should be enough to keep the 40 bed hospital reasonably well occupied. Of course, hospitals of this size usually expect to be occupied for only about 60 per cent of capacity on an annual basis.*

—Ed.

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# SMALL HOSPITAL QUESTIONS

## Labeling Medicine Bottles

**Question:** Should nurses be permitted to label or change the labels of medicine bottles?—J.R.R., Kan.

**ANSWER:** If the answer is to be yes or no, it is then "No." A nurse should never be placed in such a situation that she could be held responsible for improperly labeled medication. Should the labeling be done under the supervision of a pharmacist the responsibility is with the pharmacist. I cannot understand why a nurse would have anything to do with labeling bottles; the time of nurses these days is certainly too valuable for them to be used as assistants to a hospital pharmacist.

We have found that reliable lay personnel in the pharmacy can do the job of labeling very well. The responsibility for this is shifted to the pharmacist because he checks all of the work. This takes little time and yet we have found that the end result is good.—EVELYN GRAY SCOTT.

## Time for Sick Leave

**Question:** What is the general practice these days as to how much time should be given as sick leave? Often the employe may be off a day or two at a time and then again up to a week.—H.C., Kan.

**ANSWER:** Almost all hospitals allow from one to two weeks of paid sick leave a year. Usually, an employe must have been employed for a period of at least six months in order to be eligible for sick leave.

This sick leave is not usually regarded as cumulative from year to year, and in most instances no credit is given for sick leave not used. There are some hospitals that tie their sick leave and vacation policies together and allow employes to take time not utilized on sick leave as vacation time.—JAMES W. STEPHAN.

## Budgets for Expansion

**Question:** Our hospital has expanded from a 25 bed to a 225 bed institution and naturally the operation of it in order to be self-supporting presents new problems. Do you have or know where I can obtain information as to budgets or percentage of income that should be allocated to the operation of a hospital of this size?—N.H.C., Ohio.

**ANSWER:** George Fishback, former executive secretary of the Ohio Hospital Association, recently reported that the 1943 weighted average per capita per diem cost for all Ohio hospitals was \$6.55, with a minimum reported of \$3.40 and a maximum of \$12.52. These figures were computed on the basis of the

Conducted by Gladys Brandt, R.N.; Jewell W. Thrasher, R.N., Frasier-Ellis Hospital, Dothan, Ala.; William B. Sweeney, Windham Community Memorial Hospital, Willimantic, Conn.; A. A. Aita, San Antonio Community Hospital, Upland, Calif.; William J. Donnelly, Greenwich Hospital, Greenwich, Conn., and others

American Hospital Association's standard accounting practice as recommended in the manual entitled *Hospital Accounting and Statistics*. Mr. Fishback did not give the breakdown by the various departments of the hospital but may, perhaps, have this information also. You can write the Ohio Hospital Association, A.I.U. Tower, Columbus.

The Cleveland Hospital Council, the United Hospital Fund of New York City, the Duke Endowment of Charlotte, N. C., the Chicago Council of Social Agencies and, perhaps, other organizations regularly compile figures on the per capita costs of hospitals broken down by departments. These are usually published in *The Hospital Yearbook* but most of them were crowded out of the 1944 edition by the extensive planning data published. Earlier editions of the book contain such figures, however, and they might still be of service even though somewhat out of date.

In 1942, five North and South Carolina hospitals with over 150 beds each and with nursing schools had per capita costs of \$4.53. Of this amount, 39 cents was for administration, \$1.41, for dietary, \$1.05, for house and property (laundry, housekeeping and plant operation) and \$1.68 for professional services (medical and surgical services, pharmacy and drugs, nursing service, x-ray and radium and laboratory).

Your hospital is listed in directories as a nonprofit association. Most such voluntary hospitals expect to obtain gifts from the public to meet the cost of original construction and major additions, to provide some endowment for the institution and to permit the institution to offer from 10 to 40 per cent of its service free or at less than cost.

Under present high employment conditions, many truly voluntary hospitals are finding that the need for free service

has been cut to a minimum, while at the same time the opportunity to obtain gifts from the wealthy, the middle class and from industries has increased. The present constitutes an excellent time, therefore, for hospitals to build up funds to provide for needed improvements and extensions of service.

Hospitals can create or increase endowments that can in the future be used for research, for aid in the care of medically indigent patients or for other nonrevenue producing activities. Of course, there is a growing feeling that government—federal, state and local—should assume the major share of the expense (or perhaps all of it) for the true indigent. But there always will be some others whom a hospital can well assist.—ALDEN B. MILLS.

## Planning Aid for Hospital

**Question:** This is a small privately owned hospital in a good-sized industrial center. A great many friends and former patients have expressed a wish to help this institution in its work. Is it feasible to organize a women's auxiliary and, if so, what would be the procedure? Would it be necessary to procure a state charter? Would the first slate of officers be put into office by election or caucus of the interested group? How many women should belong and what could they do to earn money for the institution?—L.G., Mass.

**ANSWER:** Because cooperation and support of each for the other is essential, it would be advisable for representatives of those interested in the project to confer with the hospital superintendent before taking any steps to organize an auxiliary. Later, potential members might be invited to a tea or luncheon, thus creating a vehicle for explaining the functions and purpose of the proposed organization.

If the reaction at this meeting is favorable a temporary chairman and secretary, as well as a committee to formulate by-laws, could be appointed. At a second meeting the by-laws could be adopted, dues collected and officers elected under the terms provided.

No outsider can determine the limitation of membership since the plan of organization, basis of representation and local conditions are among the factors that must be considered. As state laws governing organizations operating for profit differ, the counsel for the hospital should be consulted regarding a state charter. Upon request, the librarian at the Bacon Library of the American Hospital Association, 18 East Division Street, Chicago, will send sample by-laws and fund-raising ideas.—ADA BELLE McCLEERY, R.N.





## 1895 X-RAY'S SEMICENTENNIAL 1945

1895! Chronicled one of the world's greatest scientific discoveries, which brought immortal fame to modest William Conrad Roentgen, University of Wurzburg physicist. Instinctively a scientist, he investigated a phenomenon of light observed while experimenting with an electrically-charged vacuum tube. Today, mankind, in profound gratitude, commemorates Roentgen's contribution—the X-ray.

This year, we at G. E. X-Ray also celebrate the 50th Anniversary of the founding of Victor Elec-

tric Company (presager of our present organization) by those two well-known pioneers, the late Mr. C. F. Samms, and Mr. J. B. Wantz who, as Consulting Engineer, continues a notable career.

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## LOOKING FORWARD

### Better Care for Veterans

**A**FTER World War I a great deal was accomplished for veterans for which the government may be commended. Not nearly as much was accomplished, however, as could have been done had certain basic principles been followed.

To achieve the physical and mental rehabilitation of the much larger number of veterans of this war the following conditions should prevail:

1. Modern hospitals should be established, well staffed to provide intensive care.

2. The aim of all care in the hospital should be the recovery and discharge of the veteran rather than his prolonged hospitalization or custodial stay.

3. Permanent stay in the hospital should be discouraged and a premium should be placed on cooperation by the patient in his treatment so that he may recover, be discharged and return to his home and his community.

4. Liberal financing will be necessary and should be available to provide for hospital care, as well as medical treatment. Funds should be sufficient to provide modern hospitals and modern hospitalization facilities under competent, skillful, well-trained administrators.

5. Even more important is the idea that funds be sufficient to attract a permanent medical corps by offering commissions to physicians, dentists, nurses and others with permanent rank on the same basis as is now found in the Army and Navy and, preferably, to commission them in the U. S. Public Health Service. This is the only civilian commissioned service in the United States government and the job of taking care of the veteran is a civilian not a military function. With such an arrangement a physician may be provided with a career and with retirement outside of federal civil service. It will also offer reasonable opportunity for advancement in pay and rank, the only way that permanent, expert medical care will be available for the injured, disabled and sick veteran.

6. The medical service and the operation of hospitals should be directed, without interference by or subordination to any lay person, by a physician who is well trained in his duties and who would serve under a title such as "Administrator of Medical Services" or "Director of Medical Services, U. S. Veterans Administration." His

office should operate in a manner similar to the operation now of the surgeon general's office of the Navy with a sufficient number of trained assistants not only in his central office but throughout the field to carry on these important functions.

7. The veteran patient, after discharge and while under medical care in a hospital, should be paid only the smallest stipend. As a disciplinary measure, he should be denied any pay should he fail to cooperate in treatment and care looking toward his recovery.

8. At recovery, or when he is able to be discharged from the hospital, the veteran should receive liberal pay and compensation so that he can arrange to get back into his own way of life and his own line of business. The amount of pay or compensation could be gradually reduced consistent with his complete recovery and his return to his normal earnings and income. Pensions will undoubtedly be granted but should not change this important principle.

### Public Health in the Blue Cross

**T**HE St. Louis Blue Cross plan is to be congratulated on the announcement last month of the employment of a Negro health education specialist to work among the 180,000 Negro people of St. Louis. The woman chosen for this position was formerly dean of women and associate professor at Stowe Teachers College, St. Louis.

More and more Blue Cross plans in the United States are coming to realize that their true function is as an arm of the public health movement and not as a competitor in the insurance field.

### Coal Is Scarce

**I**N SPITE of rumors to the contrary, the supply of coal in the United States is much less than the needs that American mines are called upon to supply. This is due primarily to the large demands from France. All the French coal mines have been in German hands and some of them still are at this writing. During the last war the Germans flooded and dynamited these mines so that it took two and a half years to get them back into full production. Because of the great demands for manpower in England, English coal production is below

the average level. It is, in fact, so low that the English are being allotted only 150 pounds per household for the entire winter! Hence, America must supply the deficit in France to avoid more deaths.

Much material has appeared in *The MODERN HOSPITAL* on coal conservation during the past few months. Every hospital administrator and engineer should review his practices immediately to see if any further coal saving can be effected.

## Tribute to the U.S.P.H.S.

THE architectural profession apparently is becoming aware of the valuable services in hospital design offered by the hospital facilities section of the states relation division of the U. S. Public Health Service. In a recent tribute to this service, Henry H. Saylor, editor of the *Journal of the American Institute of Architects*, points out that this section is a splendid source of technical aid in hospital planning.

Standard typical details and the like have been developed from observation and the varied professional skill of the section's personnel. These are available to a federal agency, a state health organization or a practicing architect upon request only and are given without any strings. A large number of hospital architects have found this service valuable, so much so, that 5000 copies of each of the section's publications have quickly been exhausted.

In his discussion, Mr. Saylor adds the weight of the American Institute of Architects to the idea, which has previously been urged in these columns, that the federal government should not aid local groups directly but should work through some properly qualified state agency. "The federal-local relationship does not contribute to a balanced program for the state as a whole," says Mr. Saylor. He also urges a statewide plan based on a comprehensive survey.

With architects, public health officials and hospital leaders all urging that state plans be formulated, some action to this end should be promptly undertaken in every state.

## Better Rural Hospitals

AN EXTREMELY valuable group of entries was submitted in *The MODERN HOSPITAL*'s two competitions for the design of a small general hospital and a small community health center. Undoubtedly these designs will influence for many years the construction of small hospitals in the United States inasmuch as they embody some of the best thinking on this subject that has ever been assembled.

At the present time the Commission on Hospital Care is urging state hospital associations to make plans for the provision of adequate hospitals throughout each state. In addition, the U. S. Public Health Service is working toward the same goal and is assisting in the drafting of a federal bill to give aid and encouragement to such planning. It is quite probable, therefore, that the United

States will see the construction of many more new hospitals in rural areas in the next decade.

Special attention should be given to the possibility of incorporating in these hospitals facilities for physicians and dentists to see their private patients. Also, there should be provision for the work of the local public health departments. These services are well integrated into the plans of community medical centers submitted in the competition.

It is interesting to note that the competitors have not only used the latest ideas regarding hospital organization but have also made generous use of modern materials and modern design.

The prize-winning plans will be published in the March and April issues of *The MODERN HOSPITAL* and, together with many of the other plans, will appear in book form at a later date.

## A Discriminatory Tax

AN EXCISE tax of 10 per cent upon the manufacture of electric, gas or oil appliances used for cooking or warming food or beverage is imposed by Section 3406 of the Internal Revenue Act. This tax will increase by that much the cost of such food service equipment to hospitals as well as to all other users. It is a discriminatory tax because Congress usually does not impose excise taxes upon production equipment devoted to preparation of consumer goods. Hospitals may well object to a tax of this kind which affects them so directly, particularly in view of the fact that there will be need for a large increase in the purchase of food service equipment by hospitals as soon as war conditions permit.

## Nursing Shortage Critical

EMERGENCY conferences were called last month in all parts of the United States to help find 10,000 more nurses for the Army's immediate critical needs. In addition, the Army should have 250 nurses a month to make up for losses of attrition while the Navy needs 2500 by July 1 and 150 a month thereafter.

With the tremendous drives now under way in the European and Philippine fronts and with the increase in casualties, America must some way find the nurses to take care of these casualties.

Hospital administrators, of course, have already made many great sacrifices but even more are demanded in substituting nonprofessional care for the work of nurses.

In an appeal to senior students and recent graduates, Mrs. Frances P. Bolton reports that overseas Army hospitals of 1000 to 1500 beds have had to be cut to a staff of 83 nurses with 200 enlisted men and no Gray Ladies, no aides, no ward maids and no secretaries. "Any civilian hospital of comparable size in the United States would have a nursing personnel alone of several hundred," she says.

There is the need. America will not rest until it is met.



# HEALTH CENTER

## *In the Making*

In Waterville, Me., a hospital of 35 bed capacity is making health history. From modest beginnings Thayer is following a pattern of medical education and service that promises soon to establish it as another community medical center

RAYMOND P. SLOAN

HEALTH and hospital history is in the making in Waterville, Me., a town of some 18,000 population located in the central portion of the state. It started in 1931 when a group of doctors headed by Dr. Frederick T. Hill decided that it needed a workshop of its own. No particular significance was attached to the term "group practice" at the time. What these five doctors wanted was a hospital in which they could establish and observe certain standards of medical practice. What they got was the

fine old residence of Doctor Thayer, former general practitioner, which they proceeded to do over.

Many headaches accompanied the conversion process, as may easily be imagined. The early vicissitudes of the present Thayer Hospital are paralleled in the history of numerous other cottage hospitals. Financial difficulties, physical inadequacies, professional problems were suffered individually and collectively as part of the growing pains.

The original corporation formed by the doctors was dissolved in May

1943. Its original staff of five has been doubled and a courtesy staff of 14 has been added. The hospital's 35 beds and eight bassinets are occupied most of the time, with the result that there are days when its doctors are obliged to provide for their patients elsewhere.

The expansion program of Colby College in Waterville has brought new responsibilities to the hospital in developing a health program for the student body. Of the 12 men who comprise the board of directors, five serve in a similar capacity for the college. The implications of future affiliation, therefore, are significant.

During a period of thirteen years Doctor Thayer's former residence has become a center for the continuation of medical education, for group medical practice without benefit of any formal label and also for the promotion of education among hospital administrators and trustees throughout the state of Maine.

For two years Doctor Hill has served as president of the Maine Hospital Association. Pearl Fisher, superintendent of Thayer, is in her seventh year as secretary-treasurer. Recent annual meetings of the state group held in Colby have attracted hospital authorities from many sections of the country, who have come to marvel and also to speculate on the possibilities.

Today, Thayer is operating in its own right and is ready to go places. The pattern is well defined. It fol-

Present home of Thayer Hospital in Waterville, Me., was once the residence of Doctor Thayer, former general practitioner. With its 35 beds and 8 bassinets it has become a center for the continuation of medical education, for group medical practice and for the promotion of education among hospital administrators and trustees throughout Maine.



lows the logical line of the modern hospital with college affiliation serving simultaneously as a medical workshop and as a health and educational center.

The term "group practice" as applied to what goes on at Thayer is true chiefly in the sense that several doctors, including specialists of renown, work both collectively and individually in the care of patients. As evidence of this cooperation 218 consultations took place last year, also 13 staff conferences on patients who were seriously ill or who presented obscure diagnostic problems.

What has contributed greatly to this group spirit are the staff meetings held every Thursday evening. Staff meetings at Thayer are more than the name frequently implies. They constitute open discussion which leads often to criticisms, frank criticisms. They become an educational forum, or as Doctor Hill puts it, "a continuation in medical education."

#### One Evening a Week, No Excuses

Anyway, each doctor gives one evening a week to medical education, his only excuse for absence being professional work, such as attending other medical meetings. Even sickness does not relieve him of his responsibility. Not that anyone contrives an excuse for not attending. Too much is to be gained by learning from others. Programs are sent in advance of each meeting to eight neighboring hospitals whose doctors have a standing invitation to participate. Recently, when programs failed to arrive, queries came from the neighbors. "We like to receive them even if we can't always attend," they stated.

When it can be arranged, the doctors gather informally for dinner at the Elmwood Hotel, directly across the street from the hospital. The conference may break up at 9:30, or later, depending upon what develops. Frequently, the lights in the paneled room that formerly served as library in the Thayer residence are still going at 11 o'clock.

Last year 44 such Thursday evening staff meetings were held, holidays being the chief cause of omission. Discussion usually centers about case studies selected from hospital material. Each Sunday Doctor Hill goes over the records, selecting

those cases that possess teaching value, including deaths. From these he formulates the program for the coming Thursday. Every case that presents a problem is reviewed. A blackboard is set up and a screen is provided for lantern slides. Last year sound films were used on five programs.

Now and then guest speakers are invited but restrictions in travel have reduced their number. Furthermore, general discussion of actual cases commands as much, if not greater, interest as does a formal talk. Every-



at Thayer they proceeded to devise space for one. What if it once was a butler's pantry. It accommodates a desk, a chair and one or two files. Other files are kept in the corridor outside and older records are stored away in the basement. A good-sized window furnishes adequate light and air for the full-time librarian.

Every record that is completed by Friday evening is compiled and studied by three members of the staff; all have access to them. In each instance an attempt is made to find out what the risk was and the

one gets a chance to present something.

These Thursday evenings at Thayer have proved conclusively that there is plenty of teaching material in a small hospital. The question is one of making the most of what there is. They prove also that co-operation among members of a medical staff is possible under proper leadership.

Sunday, as noted, is "record day" at Thayer. Incidentally, Doctor Hill and Miss Fisher are ready to match their records with those of any hospital. They attribute this in part to the introduction of the staff audit. This has improved not only the records themselves but the entire professional work of the hospital.

Let those who would lament the lack of space available for a records room. Instead of thus wasting time

**It's a makeshift for a medical records room but Thayer's full-time records librarian keeps records that compare favorably with those of any other hospital.**

results obtained. All deaths are analyzed carefully and graded as inevitable, justifiable or unjustifiable. Each record is checked also for its completeness and its English.

Does it substantiate the doctor's diagnosis? If not, the individual receives a confidential note. Records may be unsatisfactory for such reasons as history or physical examination inadequate, diagnosis incomplete, labor record incomplete, progress note inadequate, laboratory studies incomplete, summary lacking, poor English.

On this subject of staff audit Doctor Hill says: "Our procedure,



increasingly critical each year, shows consistently fewer serious errors and makes for improved clinical work. Our physicians manifest a keen interest in scientific medicine, they keep up on the literature and abreast of progress in the profession." He refers again to the number of consultations during the course of a year. "Credit for these," he adds, "goes to the staff audit."

Like certain other small hospitals in Maine, Thayer receives assistance in maintaining standards for its laboratory through the Bingham Asso-

ciates Service, a plan that was described in these pages recently.\* It employs a full-time technician who each year receives the benefit of a month's graduate study under Dr. Julius Gottlieb at Central Maine General Hospital, Lewiston, and an additional month at Pratt Diagnostic Hospital in Boston. During her absence one of Doctor Gottlieb's technicians substitutes for her at the hospital.

training in the Thayer laboratory, which suggests the potentialities of further working relationships. A part-time roentgenologist with a full-time technician comprises the x-ray department. All tissues are sent to Central Maine General Hospital, again through arrangements effected by Bingham Associates.

It requires a considerable stretch of imagination to visualize 40 crippled children accompanied by their parents crammed into a cellar room which now serves for a clinic. Yet if there is one quality that is

Always with emphasis upon standards, Thayer employs the services of a full-time graduate dietitian. Every resource, financial and physical, was taxed to provide the necessary facilities for adequate food service. And the food at Thayer is not only adequate but palatable and appetizingly served. The kitchen is small but thoroughly workable and the dietitian's office is another closet successfully converted. Average food costs per person per meal are about \$0.17 and Miss Fisher has further figures to prove that a qualified dietitian can save her salary and more besides.

Because those responsible for Thayer believe that a hospital should be a teaching institution they have consistently practiced what they preach by seeking outside help in meeting their many problems. Early mistakes made in converting the old Thayer home into a hospital had to be rectified and paid for in later years. These changes made in consultation with hospital authorities have worked out surprisingly well. The physical layout of the building might well form the basis of a study in economy in space.

#### Closets Take on New Duties

It has already been noted how closets have been put to professional uses. The darkroom was formerly a closet and on the second floor what was once a private bath has been transformed into a private room and its closet into a bath. Files and cupboards have had to be built in the corridors or wherever space could be found. The cellar has undergone miracles with sections partitioned off into immaculately kept storerooms, drug rooms, plaster rooms, even classrooms where the aides are taught and where clinics are held.

Miss Fisher's office was the dining room of the original residence and the present waiting room served as a parlor. But there are "lacks," many of them. There is no service elevator and the kitchen is some distance off, which is a handicap to the food service. Also, there can be no segregation of maternity work. Consequently, this service has not been developed as it might be.

As is true in most small hospitals there is considerable doubling up of personnel and use of part-time help. The telephone operator serves as office clerk; the records librarian does secretarial work when time permits;



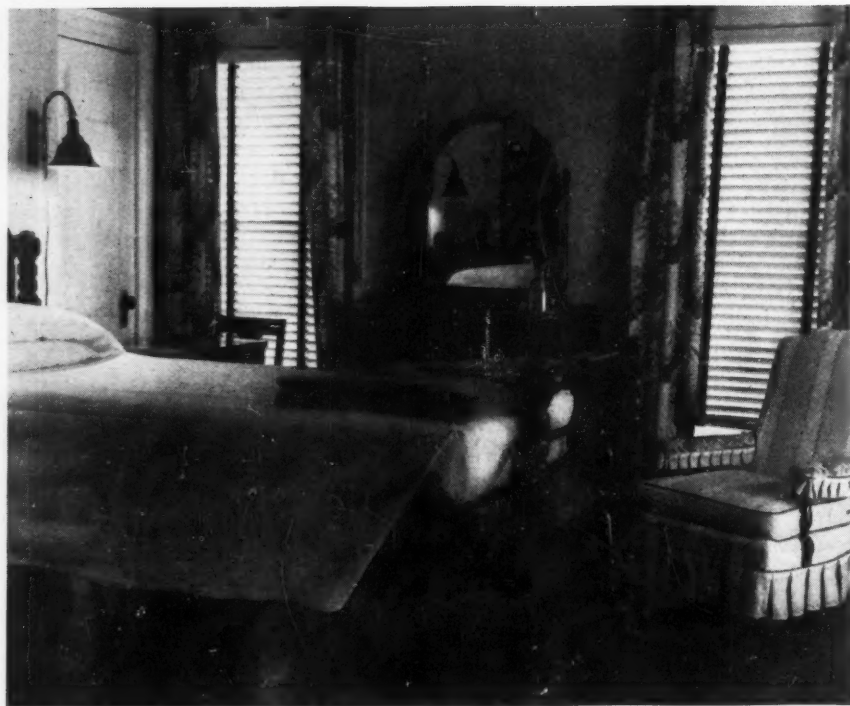
Here patients and their visitors are greeted. This is a corner of the business office which is acknowledgedly inadequate to meet the increasing demands.

needed in small hospital work, particularly in converting an old residence into a hospital, it is imagination. This crippled children's clinic, with a pediatric clinic, constitutes an important part of the state's health program. The hospital also conducts a tumor clinic and an eye, nose and throat clinic.

The Colby College health service centers in an out-patient department that, believe it or not, was originally a part of the porch. That necessity is truly the mother of invention was never better demonstrated than by the examining table with hinges that permit it to be folded out of the way when not in use. Group physical examinations of civilian male students are held here, also daily sick calls. Recently, an infirmary for male students comprising five beds has been set up on the third floor.

Last summer two students about to enter the Colby School of Medical Technology received apprentice

\*Regional Organization in Maine, October 1944.



This private room is colorfully dressed in keeping with modern trends.

the dietitian supervises linen and laundry, which is done outside, and also purchases linen and housekeeping supplies, in addition to food. A part-time auditor and bookkeeper is employed, but among plans for the future is an enlargement of the business office.

All nursing is done by a staff of 12 graduates with the assistance of one part-time nurse. The work is divided as follows: six general duty (day) nurses, two supervisors, one operating room supervisor, an assistant operating room supervisor, a night supervisor and two general duty (night) nurses. The supervisors do relief nursing when necessary.

The majority of the nurses are married and live in the town. Those who are unmarried or whose husbands are in service live in a residence a few blocks from the hospital which was given by the college in return for the infirmary service. There has been no great trouble with night nurses thus far. As an inducement these girls receive an additional week's vacation during the winter, making five weeks for the entire year. Of greatest concern at present is the number of marriages that are taking place.

Each month a meeting of the nursing staff is held at the residence. This is not merely for the benefit of Thayer nurses but for any others who may care to attend. In this re-

spect these meetings parallel the Thursday evening medical conferences.

Like other hospitals Thayer has benefited greatly by the services rendered by volunteer nurses' aides. Thirty-four of these gave 2707 hours of service during the last year. A full-time nurse instructor was provided to train these classes.

Some time ago Miss Fisher arranged with the principal of the local high school to have junior and senior girls perform certain duties at the hospital for which they would receive the necessary training. So successful was this that the state department of education has approved what will constitute a prevocational guidance course for students interested in any phases of hospital or health work. At present, 12 students are serving in the pantries, taking nourishments to patients and performing other duties.

The purpose of the program is described in a welcoming statement which each girl receives. "The junior aide prevocational service is a group of high school students primarily interested in some phase of hospital service. After a period of preliminary instructions these aides will work with the nursing staff. Its purpose is to relieve the latter group of much routine work which can well be done by trained workers, thus releasing the professional for

the work requiring skill and special training.

"In serving thus, the junior aide has an opportunity to determine whether or not she is fitted for any one phase of hospital work. This is a decided advantage in that the student is able before finishing high school to select the type of work that appeals to her and then make her plans accordingly."

This project has broader implications than its mere mention suggests. It develops community relationships, which is particularly important for Thayer Hospital which has no auxiliary, as such. The hospital has countless friends, however, who are always helping out. There is the Contemporary Club, for example, a group of 35 young women who supply workers for the clinics and who have contributed folding chairs, incubators and other equipment. Two faithful workers come to the hospital each week to mend and powder rubber gloves, and there are other friends on whom Miss Fisher has only to call when some need arises.

Far beyond the boundaries of Waterville into other sections of Maine, Thayer is making its presence felt because of the leadership it is showing in medicine and in hospital management. As part of the activities of the state association in which Doctor Hill and Miss Fisher are playing such important parts, regional meetings of administrators and board members are contributing to better understanding of mutual problems. Plans are now under way for an institute designed especially to fit the needs of small hospital people to be held some time during 1945, on Mayflower Hill, no doubt.

It is Mayflower Hill, as a matter of fact, that rolling campus of Colby College, where further chapters in the history of Thayer Hospital are likely to be written. Here is a growing college with schools of nursing and medical technology already established, and with student health demands to be met, coupled with a modern hospital which within modest limits has already won recognition for its standards and high concepts of medical education! What better pattern for rural health and education than this? Such, at least, is the thinking of visitors to Waterville who marvel at present achievements and cogitate on the future possibilities.



# Artificial Aids

BEATRICE KATZ, M.D.

New York City Hospital  
Welfare Island, N. Y.

## *open the door to independence*

CENTURIES ago, man started to make substitutes for lost senses or members—the ear trumpet, the peg leg, the Bath chair, so that he could still do some of the things he did as a whole man. In our generation, the average man has pushed his life span to almost 65 years and consequently falls heir to new chronic and disabling illnesses for which relief is indicated.

With twentieth century progress in the care of the sick, has come the growth of what Dr. Malcolm T. MacEachern calls a "hospital conscience." In "Hospital Organization and Management" he states: "Hospital organizations and individual hospital workers have entered into a period of introspection, of gauging their work in terms of service to the patient. This is an age in which the patient's rights take precedence."

It is a patient's right, in this day of mechanical genius, to have returned to him that function which he has lost or, failing complete substitution, to be given at least a means of locomotion so that he may achieve independence. This must be done for the large numbers of disabled civilians, as well as for the warriors. It is the age of rehabilitation and

wheel chairs and prostheses are important components of this mighty task.

One speaks of getting a man back on his feet again and that, literally and figuratively, is the guiding thought in the treatment of disabled patients. Most people are lucky enough to be able to get back after only a brief tussle with brace, crutch, walker or wheel chair.

More and more patients are being fitted with prostheses that restore normal appearance and even normal function so that, after retraining and psychological adjustment, they can resume a normal place in society. A much larger group of sufferers from chronic disease can be rescued from a lifetime in bed only by wheel chairs.

There are wheeled conveyances of every type, to meet every need—from a simple chair placed on a wheeled platform, such as those used at New York City Home for Dependents when there are not enough wheel chairs available, to a comfortable motor-driven wheeled armchair.

Wheel chairs may be self-propelled, pushed by an attendant, made to move by the faltering steps of an arthritic exercising his legs or pulled up a ramp by a rope and pulley. They may be large or small, wide or narrow; the frame may be of wicker, hardwood or steel; the seats, slatted, of cane or canvas, cushioned or not, solid or commode type; with headrests or without; with springs or without; with footrests that turn sideways or up out of the way; with detachable arms; with single or double raisable or removable leg rests; with adjustable or removable backs; with single or double brakes; solid or collapsible.

Thus, the patient may have just the type of chair in which he will be most comfortable, in which he can navigate independently to occupational therapy shop, church, garden, desk, piano, dining table, moving picture palace or kitchen stove.

To a patient who cannot walk and who is unsuited for artificial limbs because of arthritis, hemiplegia, Parkinsonism, diabetes, senile debility, osteomyelitis, heart disease and the like, the wheel chair is the open sesame to a nearly normal life.

New York City Hospital, a general hospital of 880 beds, has 64 wheel chairs for adults, all almost constantly in use for admission and conveyance of patients, convalescent care and daily living. Although the chairs are general hospital property and issued as such, a person who comes in the last-named category prefers to have a chair earmarked for his individual use, so that he may become accustomed to its idiosyncracies and fit it up with little extra conveniences, like a magazine rack.

The Department of Hospitals of New York, of which New York City Hospital is a unit, purchases a standard type of adjustable wheel chair for adults, specifying an adjustable back, separately adjustable leg rests, non-cane seat and back, double wheel in rear. For children, both the adjustable and rigid types are ordered.

The chairs are issued by the surgical supplies division of the hospital,



This chair has separate leg rests that are adjusted individually.



The walker has a hinged seat, adjustable handgrips and tray.

a designated number to each ward. They are kept clean on the ward, oiled weekly and sent to the carpenter shop for repairs when necessary.

When personnel allows, it is good practice to assign one man to the care of wheeled equipment, so that by routine periodic check-up he can discover minor flaws and correct them before they develop into potential dangers and require costly, time-consuming emergency repairs.

Another forward and economically sound step should be taken by the manufacturers of wheeled conveyances and parts—the parts should be standardized so that the average well-equipped repair shop can do its work without emergency orders, for example, of a nut which is just a little off size.

In a hospital in which many chronically ill patients use wheel chairs, doors and corridors should be wide and floors should be of durable material, linoleum blocks, for example. Elevators should be plentiful and roomy (76 inches wide, 84 inches deep, according to Doctors Boas and Michelson in "The Challenge of Chronic Diseases"), large enough to hold at least three wheel chairs. If level entrances are impossible, low ramps should replace steps.

Large solariums or other meeting rooms should be provided where patients can gather in inclement weather and where smoking can be safely permitted.

Next to each ward should be a suitably large space for storage of wheeled equipment when it is not in active use. About 10½ square feet of floor space should be allowed for each chair, so that corridors and wards are not cluttered and there is

no temptation for visitors to try out the wheel chairs or for irresponsible personnel to use them for transportation of supplies. If necessary, solariums, day rooms or open alcoves have to serve as storage space.

The transition from bed to wheel chair, although difficult, is usually facilitated somewhat by the desire of the patient to get out of bed. First, he must be lifted into the chair; then, if possible, he must be taught how to get into the chair easily by himself, without tipping it, how to propel it, how to get from chair to toilet to bed. After varying periods of practice, the patient masters the mysteries of the wheel chair and he is on his own for the day.

From wheel chairs patients often progress into one of several types of walkers. Walkers may be high or low, may have handgrips adjustable for height and may have attached crutches. The type we have found most useful is the low walker having a framework of steel tubing, four rubber covered casters, hinged seat, adjustable handgrips and tray. This type of walker obviates the need for an attendant for all but the feeblest patients. In it the patient can practice walking, sit down when tired and use the tray for a reading rack, for a lunch table or as an arm support during a cat nap. The walkers are light, but sturdy and easily maneuvered.

Whether the patient is to use wheel chair, walker, crutches or prostheses, the apparatus must be checked carefully before use, for oiling of parts, sufficient padding, security of straps and buckles and proper and comfortable fit.

The surface to be traversed must be examined, too, for dampness,

slippery spots and projecting tiles. The patient's greatest fear is of falling, so he must be given sufficient attention and support when he is first trying out his apparatus to give him confidence and prevent dangerous or nerve-wracking accidents.

For the walking apparatuses, lessons are planned at New York City Hospital with a definite object in mind, e.g. the patient is asked to walk to the sink for a drink, to walk to the shelf for a book, to the nurse's desk for his medication. Frequent rest periods must be provided to allay fatigue. It is often necessary to teach the patient the exact motions he must make in walking with crutches, for example, just how to get up from a chair.

If it is an artificial limb to which a patient must grow accustomed, proper care of the stump, such as adequate shrinkage, lubrication, massage and exercise, must be assured. When the prosthesis is in place and in active use, the patient must be given further instructions in the care of the stump. Keeping the hair short, plucking ingrowing hairs, using talcum powder in the summer, applying adhesive tape to the small calloused areas that may form under the heavy sock in winter, all are minor points but extremely important to the well-being of the patient.

For the small practical pointers, as well as for the spiritual uplift afforded by the contact, it is wise to have a patient with a newly acquired appliance confer with a patient who has been wearing one for a long time.

Patients learn to live with their defects and present an outward cheer and even an inner sense of well-being which are at first surprising to the average healthy person. Perhaps the reason is that those people who manage to make a life for themselves in wheel chairs or with other artificial aids feel as did Sir Arthur Pearson that "there is something splendid in overcoming a handicap—an extraordinary pleasure, too, in being, if you like, a little bit of a marvel to yourself and others."

ACKNOWLEDGMENT: I wish to thank all my colleagues who kindly contributed their experience and knowledge toward the writing of this paper, especially Dr. Henry Greenberg, medical superintendent of City Hospital; the nursing division of City Hospital; Arthur J. Cote, overseer at City Hospital, and Maxwell Lewis, superintendent of the New York City Home for Dependents.

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# SUSPECT-NURSERIES

## A Case History of Experience at St. Luke's Hospital, Chicago

### Part I

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THE suspect-nursery on the maternity floor of the hospital is a new and unique technic available in institutional management for the control of one of the major causes of neonatal deaths: infectious diseases of the new-born. Yet its use is merely the application of long-known principles of preventive medicine. The purpose of this paper is to discuss briefly from an administrative standpoint the problems involved in effecting this control.

The relationships of the suspect-nursery to the operation of the maternity department and isolation nurseries will be presented in a statement of: (1) vital statistics, emphasizing the importance of the problem; (2) the important principle of hospital service and ethics in the establishment of the suspect-nursery; (3) the underlying principle of hospital planning in the establishment of the suspect-nursery; (4) its operation from a professional and medical administrative point of view in relation to the maternity department as

a whole and the isolation nurseries of the hospital; (5) the medical staff relationships; (6) pertinent architectural, mechanical and environmental considerations in the establishment of the suspect-nursery, and (7) a summary with special reference to the objectives of the hospital.

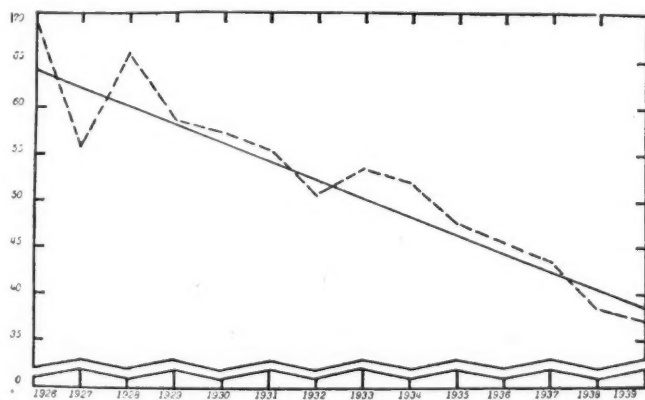
Newsholme has said that "Infant mortality is the most sensitive index we possess of social welfare. If babies were well born and well cared for, their mortality would be negligible."<sup>1</sup> Granting this, infant morbidity or sickness is an even more sensitive index of social enlightenment. The application of modern methods of health control would reduce the incidence of serious illness to negligible amounts.

Infant mortality rates during the last twenty-five years have declined from 100 to 150 deaths per thousand live births to the more encouraging

40 or 50 deaths per thousand live births. Most of this decrease occurs between 1 month and 1 year, while infants under 1 month show only a slight decline in death rate.<sup>2</sup>

Figure 1 illustrates the general decline in infant mortality rates in New York City from 63 deaths to 37 per thousand live births for the thirteen year period 1926-1939. In figure 2, the neonatal mortality rate is separated from the 1 month to 1 year age group. The latter shows a decline from 35.5 to 12.3 deaths per thousand live births during the thirteen year period 1926-1939, while a comparatively small decrease, from 32.3 to 24.8 deaths, is evident for infants under 1 month of age.

The largest problem in infant mortality, therefore, occurs in the neonatal group, or infants under 1 month of age. Deaths within the first day, the first week and the first month are the point of attack by many state and city health departments at the present time.<sup>11</sup> Infections of the new-born as a cause of



Figs. 1 and 2 reproduced from Brennemann's "Practice of Pediatrics," Courtesy, W. F. Prior Company, Inc.

Fig. 1—Mortality Trend per Thousand Live Births in Infants Under 1 Year of Age (New York City, 1926-1939).

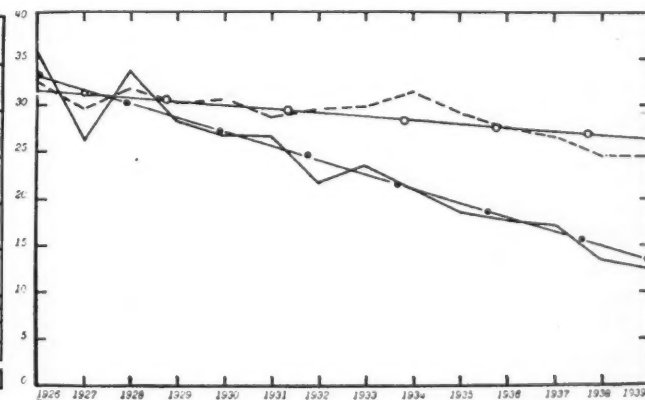


Fig. 2—Comparison of Trends of Mortality per Thousand Live Births in Infants From Birth to 1 Month (Upper Curve) and in Infants From 1 Month to 1 Year (Lower Curve) (New York City, 1926-1939).



Close-up view of the cubicle in the private pavilion suspect-nursery.

morbidity and mortality are highly significant, diarrheal disorders being prominent among the causes of infections.

A study initiated by the Chicago Health Department in 1936 indicated three major causes of neonatal deaths in need of remedial measures: (1) prematurity, (2) birth trauma and (3) infections.<sup>3</sup> The suspect-nursery is especially important in the control of infections of the new-born, the third major cause of neonatal mortality. Indirectly, it also affects favorably the other two causes by improvement of the hospital environment into which the infant is born.

There being no satisfactory method of preventing the premature onset of labor and the improved training of physicians having diminished the incidence of birth trauma to a large extent,\* the survival of the premature or traumatized infant now depends principally on improving his environment by the adoption of the following safeguards:

1. Freedom from the possibility of infections and disturbances.
2. Freedom from infection on the part of all attendants.
3. Maintenance of optimal conditions of temperature, humidity and air motion, preferably by complete air conditioning, and provision of

constant heat by use of properly constructed incubators.

4. Use of filtered air, sterilized by ultraviolet light or other method.
5. Administration of oxygen by suitable equipment.
6. Available breast milk.
7. Administration of only sterile food and water.
8. Sterilization of all clothing and bedding during laundering.
9. Individualized aseptic nursing and medical technic in caring for infants.
10. Adequate modern equipment and facilities.
11. Properly organized medical, nursing and administrative services to ensure the uniform application of the most modern scientific medical practices.

Instituting these measures will protect the premature or traumatized new-born from infection, maintain body temperature, prevent drying of the skin and respiratory system, compensate for inadequate pulmonary development, minimize strain on the digestive system and lessen disturbance of the normal or premature infant.

This paper will emphasize the importance of infections of the new-

born, the third major cause of neonatal mortality, and the manner of their control in hospital practice, especially with the use of the suspect-nursery. Infections peculiar to the new-born in contributing to the high neonatal mortality rates have not been sufficiently stressed.<sup>4</sup> This problem is important to hospitals because of their greater number of births each year.

For example, there were 1,924,591 births in hospitals during 1943 as against 621,896 in 1929, an increase of 209.0 per cent.<sup>5</sup> Fifty-six per cent of the total live births in the nation were in hospitals during 1940.<sup>6</sup> In cities, 84 per cent of the births occurred in hospitals, but in rural areas, only 25 per cent.<sup>6</sup> The problem is important to the general hospital, where more than 96 per cent of the hospital births reported in 1943 occurred, while only 3.4 per cent were in special or maternity hospitals.<sup>5</sup>

This increasing number of institutional deliveries has made unforeseen demands on hospitals and their authorities. Because facilities for the care of new-born babies have not kept pace with modern requirements, many existing methods are antiquated and dangerous. New-born infants, whether full term, premature or congenitally diseased or malformed, are cared for collectively in single open nurseries by mass methods which actually predispose to the spread of disease.

Isolation of infected babies often is carried out too late to prevent the spread of disease among other babies. Surprisingly little has been done to improve new-born nursery care, the modernizing of delivery rooms taking place in many instances to the neglect of the nursery for the new-born.

Other factors contribute to substandard care of the new-born. Understaffed nursing personnel, especially because of the war-time shortage of nurses for civilian use, is a severe handicap. Nurses often are untrained in the details of aseptic nursing technic so essential in the individualized care of the new-born. The importance of conscientious adherence to details of technic is not appreciated sufficiently by many nurses trained under an accelerated program.

Inadequacies, likewise, are common in the feeding technic and pro-

\*In smaller communities, improved training of physicians in obstetrics still may be a factor in diminishing birth trauma.





cedures of placing the infant at the mother's breast. Visitors not infrequently come in contact with the infant during this period, thereby increasing the possibility of contamination of the baby. Visitors, excluded from the mother's room during feeding, sometimes attempt to see and fondle the baby in the corridor prior to its entry into the mother's room.

The mother's hands may be washed carelessly before nursing and the washing of her breasts before and after nursing may be neglected entirely. The infant should lie on a clean paper or cotton towel during nursing, but technics vary widely and frequently are inadequate, leading to infection of infants from mothers and mothers' beds.

### Break Technic in Transporting

The transportation of the infant from the sterile environment of the nursery to the relatively unsterile environment of the mother's room causes a break in aseptic technic. The infant usually is wrapped in a blanket and carried or wheeled in his own bassinet to the mother by a nurse who wears a gown and mask. In this procedure, the possibility of introducing infection into the nursery exists because most infants are taken repeatedly from the sterile nursery into contaminated rooms.

I wonder whether the future planning of maternity departments would not be much safer if each mother and her infant were kept continually in adjacent areas, an individual nursery being attached to each room. Initial expense of construction would be increased, but the mother would be assured that her infant remained free from hazardous direct or indirect contacts with other infants, mothers and visitors. Only drastic revision in the planning of maternity floors would eliminate the present hazards.

The suspect-nursery, in the meantime, together with other proper control measures, is an effective technic in improving new-born care as it enables infants suspected of being ill to be isolated promptly, thus protecting the well baby and reducing morbidity and mortality from infectious diseases in new-born infants.

Existing procedures and regulations pertaining to the maternity department of every hospital periodically should be reevaluated critically in the light of changing needs and advances in medical science. Many

modifications are to be desired. Resident staff physicians often attempt to enter the new-born nursery ungowned, as though the white uniform were sufficient protection. After areas of sterility are determined, every effort should be made to maintain aseptic conditions therein.

DeLee, for example, at the Chicago Lying-In Hospital, had sterile cap, mask, gown and cloth overshoes placed on every person entering the delivery and labor room section of the maternity department to keep this area sterile. In most hospitals, everyone from the superintendent to the scrubwoman, including the obstetrician, enters these areas without any protection whatever.

The human shoe is probably the most grossly contaminated object to enter the hospital, yet its trek is permitted ordinarily without question or protection in delivery and operating rooms where all other efforts are made to exclude contaminating organisms.

Ultraviolet radiation as an aid to air sanitation will be discussed later. Ceiling radiation and ultraviolet light beams across doorways can promote a sterile environment where it is of paramount importance, as in the delivery rooms, new-born nurseries and other areas of the maternity floor. Air conditioning and filtration cannot be overemphasized in contributing to proper air sanitation in the hospital.

Investigation of the formula or milk room may reveal the need for improvements. The milk room may be unsuitably located owing to the danger of contamination and inconvenience in supervision by the dietitian or nurse experienced in its procedures. Individualized bottle and nipple technic mitigates the possibility of cross-contamination. Bottle nipples should not be handled by the nurse who feeds the infant.

Essential equipment and facilities may be lacking or in need of improvement. Refrigeration units adjacent to the nursery, for instance, may contain poisonous refrigerants, such as methyl-chloride, highly dangerous to infants should a gas leak

occur. Temperature inside the refrigerator may not be maintained at the required level of 40° to 45°F.

R. P. Kinsman<sup>7</sup> recently pointed out laundry methods as a source of impetigo in the new-born nursery. He emphasized the value of the proper use of bleaches and sours in the laundry process to reduce the bacterial count of the rinse water. Grace Maternity Hospital, Vancouver, B. C., demonstrated that impetigo in the new-born nurseries could be controlled in this manner when the laundry was a source of infection.

With a bleach of 0.5 per cent hyperchloride solution, 2 quarts to 100 pounds of linen, and enough sour (fluoride, acetic acid or oxalic acid) to maintain the pH of the wash water between 5.5 and 6.5, the bacterial count of the rinse water fell almost immediately from 17,000 per cc. to below 250 per cc. with a corresponding disappearance of impetigo in the nurseries. Subsequent rises in infection were due to errors in the strength of the bleach or failure to maintain the proper pH.

Since the inauguration of these laundry procedures, daily estimation of the pH of the wash water and monthly bacterial counts of the rinse water ensure that proper laundry processes are being maintained. In this manner, the nursery linen is washed by the same process as the ward linen and the bacterial count of the rinse water is kept below 250 per cc. to be effective.

### Deficiencies in Management

The following deficiencies are commonly experienced in the management of hospital maternity departments.

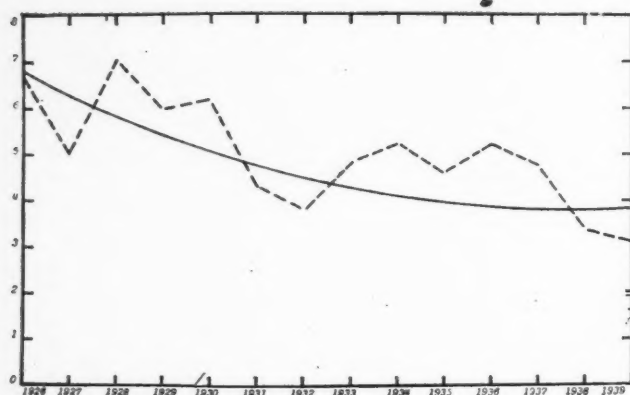
1. Failure to take periodic nose and throat swabs of nurses, excluding from the nurseries and maternity service persons with pathogenic organisms.

2. Failure to include personnel, such as housekeeping, nursing and scrub maids, in surveys of nose and throat cultures.

3. Failure to exclude visitors with evidence of upper respiratory infection from the maternity department. The masking and gowning of all visitors deserve serious administrative consideration.

4. Failure to maintain separate maternity and nursery facilities for the segregated care of morbid moth-





Figs. 3 and 4 reproduced from Brennemann's "Practice of Pediatrics." Courtesy, W. F. Prior Company, Inc.

Fig. 3—Diarrheal Death Trend per Thousand Live Births in Infants Under 1 Year (New York City, 1926-1939).

ers and their infants, removed from the general maternity floor.

5. Failure to wash and clean periodically and thoroughly the newborn nurseries.

6. Failure to limit assignment of nursing supervisors and other personnel to the maternity department and to ensure that their previous assignment has been on a noninfectious service.

7. Failure to provide separate delivery rooms remote from the operating suite for normal and morbid maternity cases.

8. Failure to assign responsibility and authority for the maintenance of standards in the care of all newborn infants in each hospital. It should be the duty of one physician or a committee of the medical staff to maintain these standards.

9. Failure to maintain an up-to-date book of procedures, standardizing technics in the care of the newborn and the medical management of the maternity service, for the guidance of resident and attending physicians and nurses.

These delinquencies, in conjunction with the notorious susceptibility of new-born babies to infection and the remarkably rapid spread of infections from baby to baby in nurseries<sup>4</sup> inadequately constructed, equipped and controlled, foster the occurrence of infections among newborn infants in hospitals and are a serious indictment against the current practices of hospitals obligated "to surround the patient with every reasonable protection, thereby fulfilling the moral and legal responsibility of the board."<sup>8</sup>

Scientific evidence corroborates the seriousness of the problem. Diarrheal

deaths of infants have been studied for the period 1926-1939 in New York City. There had been a general decrease up to 1932, when an upswing was evident (Fig. 3). When the diarrheal deaths per thousand live births in infants from 1 month to 1 year of age are separated from those of birth to 1 month of age (Fig. 4), the former shows a constant decline, the latter a constant increase. This upward trend among neonatal infants is due largely to the syndrome epidemic diarrhea of the new-born, a new disease among new-born babies in nurseries, increasingly prevalent since 1928, as reported in American and foreign literature.<sup>4</sup>

Hospital infections of the new-born require a technic of their own and usually are handled as follows. The innocent appearing rash of the new-born or the four or more loose stools of the breast-fed infant are observed first by the attending nurse, who notifies the intern or resident on service. The latter, if suspicious after proper investigation, customarily awaits the attending physician to decide whether the infant should be isolated.

More often than not, the attending physician is ultraconservative and minimizes the possibility of infection, particularly if the isolation procedure involves removing the infant from the maternity floor to a separate isolation nursery where special nurses must be hired at the patient's

expense. His natural tendency, therefore, is to postpone placing the infant in isolation until he is certain.

Should the infant prove to have an infectious condition, after observation of from one to three days, the damage already has occurred, exposure of all the infants to a proved case of infection having taken place. As a result, the nursery is in jeopardy of new cases. Isolation of an infant under such circumstances is carried out too late to be effective in preventing the spread of disease to other new-born infants.

The modern concept of preventive medicine is to prevent disease rather than to attempt the control of disease after its appearance among individuals or groups. Measures should be adopted, therefore, whereby an outbreak can be detected at its inception and prompt steps instituted to stop its spread.<sup>4</sup>

The establishment of the suspect-nursery, with proper accompanying regulations, is a mechanism whereby such an objective is achieved at minimum expense to hospital and patient. Every hospital caring for maternity patients should establish proper facilities and regulations for such a nursery and ensure its smooth integration into the operation of the maternity department.

It is particularly valuable in the detection and isolation of the primary case of epidemic diarrhea of the new-born, which usually occurs unsuspected and is followed characteristically by several secondary cases in the course of one or two weeks or more, after a latent or interval free period. Secondary cases of epidemic diarrhea may be prevented by the prompt recognition

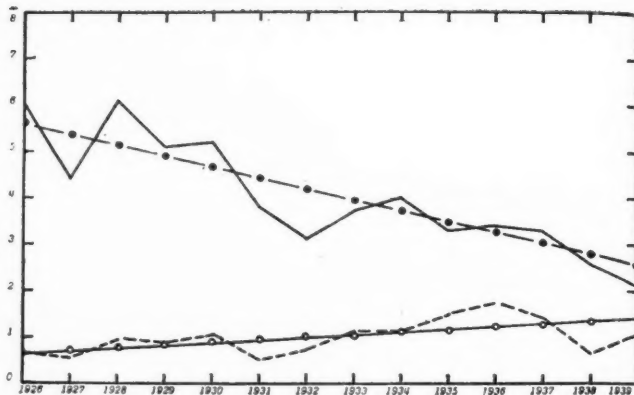


Fig. 4—Comparison of Diarrheal Death Trends per Thousand Live Births in Infants From 1 Month to 1 Year (Upper Curve) and in Infants From Birth to 1 Month (Lower Curve) (New York City, 1926-1939).



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and isolation in the suspect-nursery of the primary case.

The establishment of suspect-nursery units at St. Luke's Hospital, Chicago, in the latter part of 1943 has been an effective application of the principles of preventive medicine to the control of infectious diseases of the new-born. The control of new-born morbidity is the first step in the control of neonatal mortality from infectious diseases, a major cause of infant deaths under 1 month.

During the six month period from Jan. 1 to July 1, 1944, 75 infants were placed in the suspect-nursery units of our hospital out of a total of 601 babies in the normal new-born nurseries. Of these 75, 14 developed definite infectious conditions and were removed further off the maternity floors into isolation nurseries. This is a morbidity rate of 23.3 cases per thousand live births.

The accompanying table analyzes by disease groups the 75 infants isolated in the suspect-nursery units, according to the point of origin from an air-conditioned or a non-air-conditioned nursery.

It is of interest to note that 28 of the cases involved gastrointestinal disorders and 31 were infections of the skin. Of the gastrointestinal disorders, 3 proved definitely infectious and warranted further isolation, as did 9 of the 31 skin cases. The preponderance of gastrointestinal cases came from the ward nursery, which is not air conditioned. The number of gastrointestinal cases in the air-conditioned nursery was negligible.



Of interest also is the fact that the majority of skin cases came from the private nursery, where an oil bath is given shortly after birth and at subsequent intervals. A marked decrease in skin infections was noted in the ward nursery when the oil baths were discontinued.

The various suspect morbidity and actual morbidity rates are indicated in the accompanying table. During the same six month period, there were 10 infant deaths, a neonatal mortality rate of 16.6 deaths per thousand live births. This compares favorably with the neonatal mortality rate of 21.1 for the 39 hospitals in Illinois having 1000 or more births during 1943. The 10 infant deaths, classified, are as follows:

<i>Cause of Death:</i>	
Prematurity .....	6
Bronchopneumonia .....	2
Birth trauma .....	1
Hemorrhagic disease of the new-born .....	1
Total .....	10

The causes of death were verified by necropsy in all cases except two of prematurity. Most of these 10 infants were housed in the premature nursery. No deaths occurred among the 75 suspect cases or the 14 who were further isolated off the maternity floor.

The use of suspect-nurseries in our hospital has made the isolation of

infants suspected of having an infectious condition a matter of ease and promptness without an additional financial burden being placed upon the patient. Nursing care for infants in the suspect-nurseries is provided by the nurses on the maternity floor, never by those caring for the normal or premature new-born.

Should isolation off the maternity floor be required, nursing care for the isolated new-born is furnished by the pediatric nursing service. It should be noted that with epidemic diarrhea of the new-born no instances have been revealed in which the disease spread to older children or to adults caring for the sick babies.

The isolation of "suspect" cases is now a matter of routine, never resulting in delays which previously existed to the detriment of all the infants in the new-born nursery. Nor does it add to the financial cost above the regular obstetric rate, unless the infant remains in the hospital after the discharge of the mother ten days following delivery.

This practice places service, safety and care of the infant patient foremost and above any other consideration, which is as it should be, for "to render care to the sick and injured is the primary responsibility of the hospital; financial return and other interests should be of secondary consideration."<sup>8</sup> The suspect-nursery functioning in such fashion promulgates this important doctrine of hospital service and ethics.

Another important principle, illu-

"Suspect" and Actual Morbidity Rates of Newborn Infants, St. Luke's Hospital, Chicago, Jan. 1 to July 1, 1944

Disease Groups or Anatomic System or Part Affected	Total No. of Cases	Ward Suspect-Nursery Cases, No. of Cases From Non-Air-Conditioned New-Born Nursery	No. of Cases Isolated From Ward Suspect-Nursery to Pediatric Floor	Private Suspect-Nursery Cases, No. of Cases From Air-Conditioned New-Born Nursery	No. of Cases Isolated From Private Suspect-Nursery to Pediatric Floor	Total Neonatal "Suspect" Morbidity Rates (Cases per 1000 Live Births)	Total No. of Cases Isolated on Pediatric Floor	Actual Neonatal Morbidity Rates (Cases per 1000 Live Births)
Diarrhea <sup>1</sup> .....	28	26	3	2	0	46.6	3	4.9
Skin involvement <sup>2</sup> .....	31	10	4	21	5	51.5	9	14.9
Respiratory.....	1	1	0	.....	.....	1.6	0	0
No prenatal care or disease of mother.....	8	6	2	2	0	13.3	2	3.3
Congenital anomalies <sup>3</sup> .....	3	.....	.....	3	0	4.9	0	0
Thrush.....	2	1	0	1	0	3.3	0	0
Eye.....	1	1	0	.....	.....	1.6	0	0
Dehydration fever.....	1	1	0	.....	.....	1.6	0	0
Total.....	75	46	9	29	5	124.8	14	23.1

<sup>1</sup>Four or more loose stools in twenty-four hours, except in entirely breast-fed infants who show no other signs of illness and are gaining weight.

<sup>2</sup>Macular or papular rash, miliaria, pustular dermatitis, impetigo or impetiginous-like lesions or discharging lesions of any character.

<sup>3</sup>Congenital heart, enlarged thymus or taken from floor for chest or thymus x-ray films.

strated by the installation in the hospital of suspect-nursery units, involves the planning of hospital structural changes. Hospital buildings and plant should be flexible enough to meet the alterations required by an advancing medical science which, by constantly developing new procedures, techniques and apparatus, necessitates modifications in the hospital layout.

Flexibility is one of six important principles in hospital planning. The late Dr. S. S. Goldwater, dean of hospital consultants in the United States, said: "Experience has shown that the conditions which constitute the environment of the hospital are constantly undergoing modifications; social changes, community growth and scientific discovery create new demands which the hospital is called upon to satisfy. Healthy hospitals are growing hospitals, but their growth is not necessarily symmetrical. . . . Pressure is constant, from within and without, and the hospital must be in a position to accommodate itself to every reasonable demand. An inflexible plan is a forerunner of trouble."<sup>9</sup>

Our experience certainly has verified the wisdom of this statement. The greater number and proportion of births constantly occurring in hospitals, the rising incidence of diarrheal diseases in infants from birth to 1 month of age and the relatively high incidence of *suspect-cases* requiring isolation have more than justified the installation of suspect-nursery units in our hospital as a mechanism for meeting this new problem presented by the inception of an apparently recent disease entity of the new-born and the desirability of applying modern concepts of preventive medicine and disease control to the augmented and increasing number of hospital births.

#### Can Meet New Demands

The physical adaptability of the maternity floor illustrates how flexibility in planning has enabled the hospital to meet new demands, thus ensuring greater protection and care for the new-born. Similar improvement is needed in most hospitals currently caring for maternity patients and would constitute a significant contribution in improving the care of the new-born and the operation of the maternity departments of hospitals.

Frant and Abramson<sup>10</sup> contended that fundamental changes in the conduct of the obstetric and new-born services are essential for the control and prevention of infections in hospital nurseries. The suspect-nursery constitutes such a fundamental technique and its general use in maternity units is warranted. The haphazard, uncontrolled expansion of maternity accommodations in hospitals, with inadequate facilities for the proper care of the mother and her new-born baby, definitely should not be permitted to continue.



## Part II

A BRIEF description is in order of the operation of our suspect-nursery units in relation to the isolation nurseries and to the maternity department as a whole. That any new-born infant with or suspected of having an infection must be isolated immediately to ensure good medical management is a ruling of the board of health for all hospitals caring for maternity patients in the city of Chicago. The suspect-nursery, however, is the only satisfactory method whereby strict conformance to this regulation can be obtained.

To comply with this ruling and to ensure strict isolation precautions, infants in the clean new-born nurseries are moved immediately into the suspect-nurseries, maintained on the ward and private maternity pavilions, whenever signs or symptoms develop of illness or infection, such as fever, loose or frequent stools, eye, skin or vaginal infection, or any of the following disorders:

1. Macular or papular rash, miliaria, pustular dermatitis, impetigo or impetiginous-like lesions of any character.
2. Discharging lesions of any nature.
3. Four or more loose stools in twenty-four hours, except with entirely breast-fed infants who show no other signs of illness and are gaining weight.
4. Other diseases, infectious or not.

The infant is moved into the suspect-nursery immediately by authority of the nurse without an attending staff man, resident or intern seeing

the infant. The purpose is to protect well babies in the new-born nurseries from suspicious cases. Strict individual isolation technique is carried out by floor nurses for infants moved into the suspect-nurseries. Under no circumstances do nurses in the clean nurseries come in contact with infants isolated in the suspect-nurseries.

Infants in the suspect-nurseries are moved off the maternity floors to designated isolation nurseries when the disease or lesions become definitely infectious or transmissible in character. Removal to the isolation nurseries on the pediatric floor of the hospital distant from the maternity floors is carried out only on the authority of the attending physician, pediatric or obstetric resident. Likewise, an uninfected case is returned to the clean nursery from the suspect-nursery on authority only of the attending physician or his resident.

A reserve isolation nursery, with three cubicle bassinets, is available on one of the general floors of the hospital, but remote from the maternity floors. Supervision of the isolation nurseries falls entirely upon the pediatric service for medical and nursing care.

This routine has made it possible to remove from the environment of well babies at the earliest possible moment an infant suspected of having an infection or illness. Standardized procedure and regulations are in written form for the information and guidance of attending and resident physicians, nursing staff and other personnel. Formal approval of the pediatric and obstetric departments and the hospital administration ensure proper enforcement.

#### Medical Director Kept Informed

A part of the routine is a report (see opposite page) submitted to the medical director, with a copy to the director of nurses, of each infant moved into or out of the suspect-nurseries. The medical director thereby is informed constantly of the sick new-born infants in the hospital and can confer with attending physicians, resident staff and nursing personnel whenever necessary to ensure proper control steps to prevent spread of infection. It serves also as a further check that reports are made properly through the hospital epidemiologist to the



local and state health departments.

Informal conferences are frequent between the medical director, attending men or their residents and the nursing staff. When necessary, a physician-consultant is always available from the infant and maternal welfare section of the Chicago Health Department for consideration of special problems. These relationships, formal and informal, by telephonic or personal contact, always have been pleasant and cooperative.

In the private maternity pavilion of the hospital, the responsibility for the care of the new-born infant is one of mutual consent between obstetrician and pediatrician. In the ward maternity pavilion, the conduct of the entire new-born nursery is the responsibility of the pediatric department.

The obstetric resident is the liaison officer between obstetrician and pediatrician if there is no pediatric resident; he carries much of the responsibility for the ward service. If pediatric and obstetric residents are appointed, joint daily rounds are made in the new-born and suspect-nurseries. The supervising nurses of the general maternity service and new-born nurseries are responsible to pediatrician and obstetrician for properly executing medical orders and technic.

The pediatric service is organized so that the chiefs alternate in supervision of the new-born nurseries. This period of supervision is arranged so that the chief responsible for the new-born nurseries is not called upon to oversee the general pediatric service during the same period.

Two divisional obstetric chiefs rotate semiannually in charge of the obstetric service under the general chairmanship of an obstetric-gynecologic department head. This professional organization establishes fixed responsibility for the management of the obstetric service, as well as for the new-born and suspect-nurseries.

Hess<sup>11</sup> has stated well the relationship of pediatrician and obstetrician to the care of mother and new-born and the importance of joint periodic rounds to attain these objectives, as well as solving the problems of breast feeding:

"The accomplishment of the best results will be dependent on definite vesting of authority for the conduct

# REPORT OF INFANT MOVED INTO OR OUT OF SUSPECT-NURSERIES

Age.....Obstetric  
INFANT'S NAME.....Date of Birth.....Sex.....Floor.....  
Attending Obstetrician.....Attending Pediatrician.....  
Condition for which nurse moved infant.....  
(Nurse has authority to move infant into suspect-nursery, but only physician can order infant to be moved from suspect-nursery to the isolation nursery or to the normal new-born nursery.)  
Attending Physician's Diagnosis.....  
(Do not delay sending report if this information is not available.)\*  
To Where Was From Date of Time of  
Infant Moved.....Where.....Removal.....Removal.....  
REMARKS.....

(Signed).....  
Nursing Supervisor

\*(Note: Complete in duplicate. Send original to medical director and duplicate to director of nurses immediately.)

of the maternity division and the new-born nursery in reliable and deeply interested medical staff members under whose authority and direction the nursing staff functions. . . . At stated intervals, rounds of the lying-in division and nursery should be made by the obstetricians and pediatricians so that there can be a definite understanding covering the views of both departments concerning the care of the mother's breasts and the technic established in the nursery. The chief obstetric nurse, the nurse in charge of the new-born nursery and the house staff should be included in these ward rounds."

In the establishment of a suspect-nursery unit on the maternity floor, certain architectural, mechanical and physician environmental considerations are important. Little consideration has been given in textbooks of pediatrics and obstetrics to the planning of hospital nurseries, but some medical, nursing and hospital professional journals in recent years have published articles on the subject.

"As a result of clinical experience and research, certain basic standards have been developed for nursery care of new-born full-term and premature babies.<sup>12,13,14</sup> The plan for hospital nurseries that meet the most recent

standards requires, among other things, that each nursery house relatively few infants; that the bassinets be widely spaced or separated by partitions into cubicles; that facilities be provided for using aseptic technic and for giving individual bedside care to each infant; that optimum conditions of temperature, relative humidity and ventilation be maintained, and that there be provisions for special care of premature infants and for isolation of infants who are ill or suspected of being ill."<sup>6</sup>

That infants are being cared for collectively in open nurseries<sup>4</sup> that have become overcrowded with the increasing number and proportion of births in hospitals<sup>6</sup> has been emphasized previously and is commonplace in many, if not the majority, of hospitals today. Few normal new-born nurseries provide per infant for an average of 300 cubic feet of air space and 30 square feet of floor space, together with complete air conditioning, that is, controlled temperature, humidity and air motion, in conjunction with filtered air sterilized by ultraviolet light or some other method.

Modern scientific medical concepts require, furthermore, that bassinets be separated by partitions forming cubicles of sufficient size to enable a nurse to give bedside care conveniently to each infant,<sup>6</sup> and that each full-term infant nursery house not more than eight, and each premature nursery, not more than four infants, the maximum number of in-



fants that can be cared for satisfactorily in either case by one nurse.<sup>6</sup>

Such an arrangement keeps the bacterial contamination of the air reduced to a minimum and controls infections, should they occur, by epidemiologic methods. These physical factors of importance in the environment of the new-born infant have proved scientifically efficacious in protecting him from infections. Yet in many instances the modernizing of delivery rooms has preceded the improvement of the new-born nursery.<sup>11</sup>

The lag in the application of this knowledge to the institutional care of infants in hospitals is a serious indictment against present-day management of most hospitals caring for maternity patients.

What has been said concerning the physical environment of the new-born nursery can be applied with equal validity to the suspect-nursery, for in the latter the infant or infants are suspected of being ill. Individual isolation aseptic technic becomes increasingly important, therefore, so that cross-contamination or infection, inexcusable and probably catastrophic as far as the individual infant is concerned, never can occur.

The architectural design of the suspect-nursery essentially is not different from a well-planned isolation nursery. The location and function of the former, however, are vastly



dissimilar from the latter in relation to the operation of the maternity department as a whole. The suspect-nursery is always located on the maternity floor, but completely separated from the nurseries for well infants; the isolation nursery is remote from the maternity unit. "Even in small hospitals the suspect-nursery should never be used for infants who have conditions that have been definitely diagnosed as infectious."<sup>15</sup>

In planning the suspect-nursery, consideration should be given as to whether it is to be a functional part of a newly designed or an already existing maternity department. In the former instance, the suspect-nursery can be planned as a much closer integral unit of the normal and premature nurseries than in the latter case where usually there is not the opportunity to make radical alterations of floor design, in which event improvisation is required according to an existing situation. Such was our condition and, as a matter of fact, is likely to be true where environmental modifications according to new regulations must be adapted to the physical arrangements of maternity and new-born services as they exist today.

In our private maternity pavilion, the obstetric unit occupies the entire floor of a U-shaped building; in the ward pavilion, the entire floor of a ribbon-shaped building. In the former, the nursery units are at the outer base of the "U" on one side of the corridor and in the latter, at one end of the floor and on one side of the corridor.

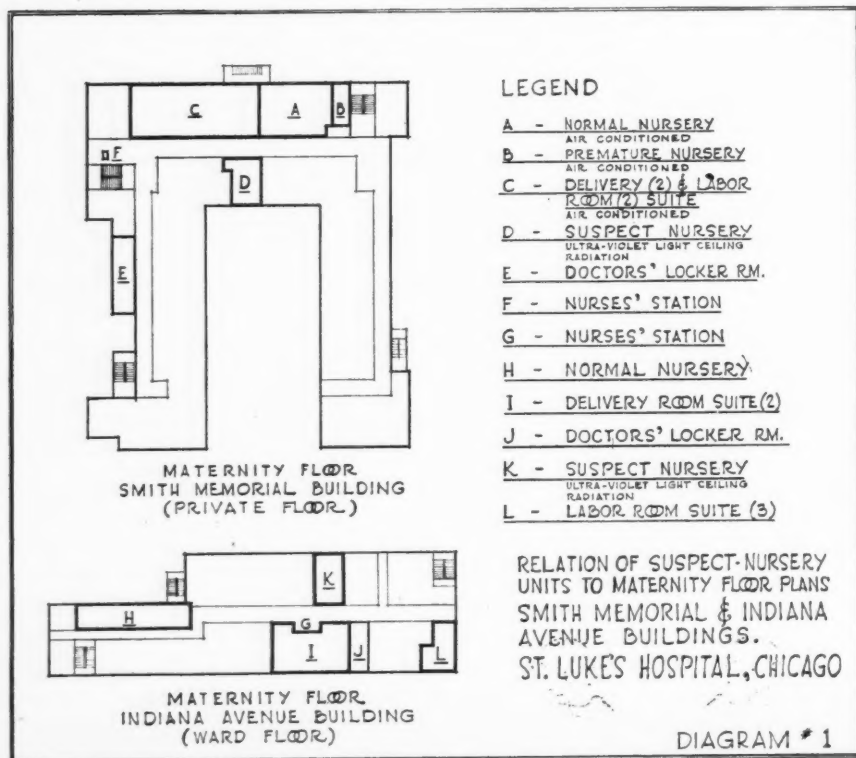
The delivery and labor rooms are adjacent to the nursery units on the same side of the corridor, on the private side (air-conditioned delivery, labor and nursery units); on the ward side, the labor rooms are in the midportion of the building on one side of the corridor, remote from non-air-conditioned nursery units and labor rooms at opposite ends of the ribbon building.

The rest of the areas on the private and ward floors are occupied for the most part by patient accommodations, with the exception of utility and receiving rooms, physicians' and interns' quarters, waiting and reception rooms. The nurses' stations are recessed off corridor areas (Diagram 1).

With this somewhat complicated situation to face, the location of the suspect-nurseries presented various alternate choices, each presenting advantages and disadvantages in relation to the functional operation of the floor. As the suspect-nursery units, in each instance, should be separated from the normal nursery, with a separate entrance off the corridor, a wide range of choice in their location was presented.

From a functional standpoint, it was decided to have nursing care rendered by floor nurses, rather than by nursery nurses, as an additional safeguard in preventing contact between the normal and suspect-nurseries. The suspect-nursery on the ward floor, therefore, was situated diagonally across from the nurses' station, which is in the midportion of the ribbon-shaped building, subject to almost continual observation by floor nurses.

On the private floor, for the same reasons, it was located at the base of the U-shaped building, on the inner side, diagonally across the corridor from the normal nursery and delivery-labor room unit, approaching toward rather than away from the nursing station. A three bed room, 23 by 15 by 10 feet, was converted on the ward side, and a large single





room, 22 by 14 by 10 feet, on the private side for these purposes.

An anteroom on both floors was provided between the corridor and the cubicle area of the suspect-nursery. On the ward side, it was 6 feet in depth and 15 feet in width, leaving an area 17 by 15 feet for the cubicle area, with a 10 foot ceiling. On the private side, the anteroom was 8 by 14 feet, leaving an area 14 by 14 feet for the cubicle space, with a 10 foot ceiling.

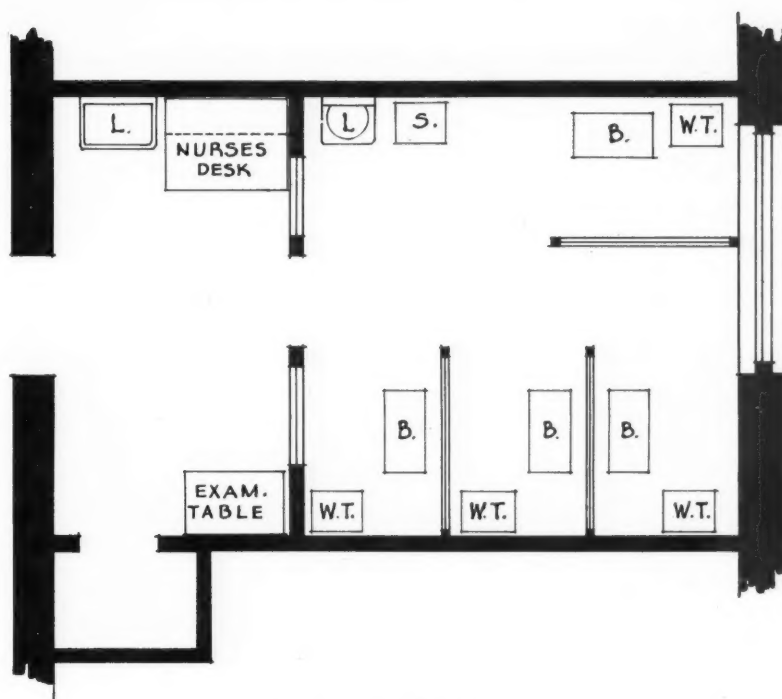
A minimum of 40 square feet and 400 cubic feet is recommended for each bassinet in the suspect-nursery. Six cubicles are installed in the ward and four in the private suspect-nurseries, providing one suspect-bassinet for approximately every five bassinets for well infants. Two bassinets for suspect-cases are recommended for even the smallest hospital.

Air space for each infant is ample and well above the recommended minimum, being 42.5 square feet and 425 cubic feet for each infant in the ward suspect-nursery and 49 square feet and 490 cubic feet per infant in the private suspect-nursery. These space provisions are sufficient to permit individual bedside care and treatment to be rendered conveniently.

The cubicle partitions extend 7 feet high, leaving 3 feet of space above and from 9 to 12 inches below the partitions to aid ventilation. At a point 38 inches above the floor, upward to the height of the partition, construction is of glass. Windows in the partition and door between the anteroom and suspect-nursery proper and in the door between corridor and anteroom in both nurseries make possible complete observation of the suspect-nurseries by the nurses from the corridor.

The accompanying photographs show various views of the suspect-nurseries. It should be noted that the cubicle partitions extend well beyond the bassinets, being 73 inches and 51 inches in depth, 48 inches and 64 inches in width, on the private and ward floors, respectively. Hooks are visible on each partition for individual gowns required in the isolation technic.

The equipment and facilities of the suspect-nurseries are as follows (reference may be made to the accompanying photographs and floor plan sketches, Diagram 2). ➡

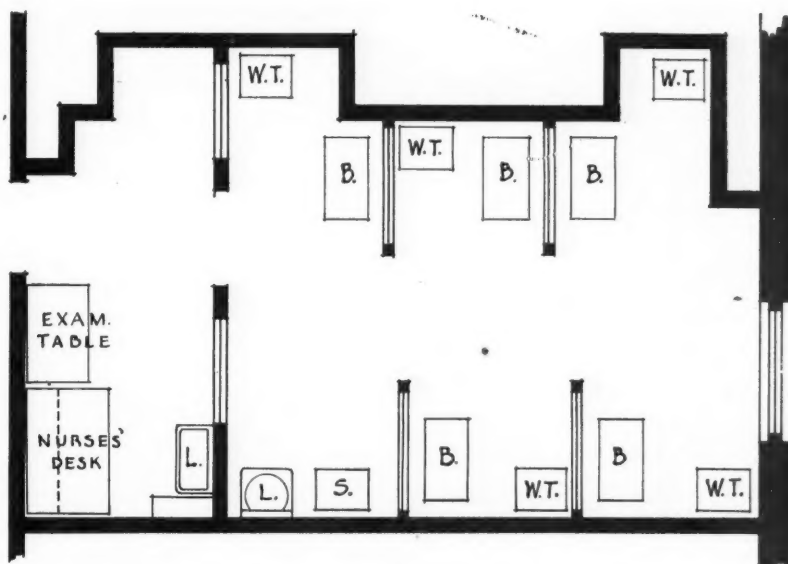


## SUSPECT NURSERY SMITH BUILDING (PRIVATE FLOOR)



### LEGEND

B ..... Bassinet    S ..... Scale  
L ..... Lavatory    W.T. .... Work Table



Schmidt, Garden  
and Erikson  
Architects, Chicago

## SUSPECT NURSERY INDIANA AVENUE BUILDING (WARD FLOOR)

## ANTEROOM

1. *Minimum Equipment:* Nurses' desk and shelf, examining table, supply cabinet or closet, instrument sterilizer or hot plate, lavatory and sanitary can for waste.

2. *Linen Hampers:* One linen hamper with removable bag is provided in each anteroom for soiled linen other than diapers.

3. *Viewing Windows:* Viewing windows are provided between the anteroom and the cubicle area, in the door and partition on either side and in the corridor door.

4. *Ultraviolet Light Wall Units:* Ultraviolet light wall units are provided with ceiling radiation. Combination units which allow, also, for a barrier curtain across the corridor door are desirable.

## CUBICLE AREAS

1. *Bassinets:* A unit type of bassinet is provided with stationary cabinet below for the supplies needed in the care of each infant. It consists of a steel band basket which can be removed for washing. A shelf can be pulled out and up at one end of the bassinet to serve as a work table. The bedside table, sketched in the drawing, therefore, can be omitted (Diagram 2).

2. *Lavatory:* A lavatory with foot-control faucets for hot and cold run-

ning water is located in each cubicle area and anteroom.

3. *Sanitary Cans:* At least three sanitary cans are provided, one for soiled diapers, another for soiled linen and dresses and a third for waste material.

4. *Examining Table and Scales:* An examining table and scales are in the cubicle area in each suspect-nursery.

5. *Ultraviolet Light Wall Units:* These may be placed over the nursery door and in the center of the room suspended from the ceiling or on two opposing walls. Their placement depends on the size and shape of the ceiling area to be covered. Sterilization of air at the entrances to the cubicles provides added protection.

6. *Ventilation, Control of Temperature and Relative Humidity:* Continuous air circulation should be maintained around the bassinets without drafts or air currents that will strike the infants. The air volume of the room thereby is exposed uniformly to the bactericidal ultraviolet ceiling radiation. In the photographed rooms, air spaces for circu-

lation have been provided above and below the cubicle partitions.

"Complete air conditioning is recommended, that is, controlled temperature, humidity and air motion; [it is recommended] that the air be filtered and that it be sterilized by ultraviolet light or by some other method."<sup>15</sup>

The room temperature should be thermostatically controlled at about 80° F., day and night, and the relative humidity should be maintained at about 50 per cent. Higher temperature and greater relative humidity may be required for premature infants in a separate air-conditioned nursery or by the use of incubators, according to specifications of the National Bureau of Standards and the U. S. Children's Bureau.<sup>16</sup>

The installation of a suspect-nursery unit on the hospital maternity floor presents a unique opportunity for the application of sanitary air control to the environment of the new-born infant suspected of being ill. Air sanitation in the hospital environment has not received the consideration it deserves. Diseases of the respiratory tract represent a major challenge to modern medicine at the present time. Air sterilization by physical or chemical means promises to play a significant part in the control of respiratory diseases.

Figures for the year 1933 from the U. S. Public Health Service indicate the significance of air-borne diseases to the health of the American people:

1. More than 85 per cent of deaths from infectious and parasitic diseases in the United States were from diseases in which the inciting organisms usually entered by way of the nasopharynx.

2. The incidence of measles was first and influenza was second of the reportable diseases.

3. The three major causes of illness, comprising more than half of the total cases, based on nationwide periodic surveys from 1928 to 1931, were: (1) colds and bronchitis, (2) influenza and pneumonia and (3) tonsillitis.

4. The largest single cause of illness of eight days' duration among industrial workers was influenza and pneumonia.

5. Influenza and pneumonia caused more days in bed than any other diseases, according to nationwide periodic surveys from 1928 to



A nurse scrubs up in the lavatory unit of the cubicle area, suspect-nursery, private pavilion. These lavatory units are located in each cubicle area and in the anteroom.

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1931. Colds and bronchitis ranked second; tuberculosis, third. The diseases spread through the nasopharynx caused a total of 218 days in bed for every hundred persons, as against 167 days in bed from all other causes combined.<sup>17</sup>

In the hospital, with its concentration of sick people, the opportunity for air contamination and cross-infection is great. Brief comment will be made on the scientific information available of the hazards present in the air of the hospital environment and the measures available for their control as applied particularly to the suspect-nurseries and newborn nurseries of the hospital.

W. F. and M. W. Wells determined from a study of samples of air taken from well-baby clinics, children's medical clinics, hospital wards, theaters, factories, school-rooms and outdoor air<sup>17</sup> that the number of alpha streptococci in the air correspond to the degree of contamination by the occupants. Torrey and Lake<sup>18</sup> confirmed this work with bacterial analyses of the air of a large department store by use of the Wells air centrifuge during the course of a year and found a marked correlation between the prevalence of alpha and gamma streptococci in the samples of air and the prevalence of colds among the thousands of employees.

It was concluded by Wells, Torrey and Lake that the presence of the alpha hemolytic streptococcus in the air, an organism normally present in the nasopharynx, "may be taken as an indicator of the pollution of the air by nasopharyngeal discharges in a manner similar to that in which *Esch. coli* has been accepted as an indicator of pollution of water supplies by sewage."<sup>18</sup>

"It would seem obvious that under conditions of crowding in enclosed rooms, we are breathing one another's nasopharyngeal flora as we once drank each other's intestinal flora in our water supplies, and the consequences of such practices become a study in sanitary science."<sup>17</sup>

The most spectacular demonstration of the efficacy of sanitary air control in the prevention of cross-infections of the respiratory tract among infants in a nursery was reported by Sauer, Minsk and Rosenstern<sup>19</sup> in 1942 in a study made at The Cradle in Evanston, Ill., from 1937 to 1941.

This view, taken inside the cubicle area looking toward the ante-room, shows the viewing windows in the door and partition and the ultraviolet light above the door.



"The adoption of the Dick aseptic nursery technic<sup>20</sup> at The Cradle in 1929 practically eliminated hand-borne cross-infections, such as enteritis and impetigo. . . . During the six years prior to the introduction of this aseptic technic (1923 to 1928) a total of 942 infants was admitted. There were 55 deaths, 53 due to enteritis. In 40 of the fatal cases infection was contracted after admission.

"During the twelve years since the introduction of the aseptic technic, 3132 infants have been admitted. There were 26 deaths, 6 due to enteritis. In no case was infection contracted after admission. The total mortality rate before the introduction of the aseptic technic was 5.8 per cent and after its introduction, 0.8 per cent."<sup>20</sup>

After the problem of hand-borne infections had been controlled, however, that of the respiratory infections remained. In 1939, a new building was erected at The Cradle "to investigate newer principles in the control of air-borne infections: air conditioning, germicidal lights and mechanical barriers."<sup>19</sup> Three

units of 12 cubicles each were constructed as follows:<sup>19</sup>

1. *Control Unit*: Each cubicle was air conditioned with 100 per cent outside air. The air, at a temperature of 75° F. and a relative humidity of 40 per cent, entered near the ceiling and left near the floor. There was a complete change of air every six minutes.

2. *Light Unit*: Designed by William F. Wells,<sup>17</sup> this unit was air conditioned like the control unit. In addition, germicidal lights were placed above the open end of each cubicle to throw a vertical curtain of light across each entrance. Six of these cubicles were separated by partitions from ceiling to floor; in the other six, light curtains replaced alternate solid partitions. Ventilation tests of the bacterial tightness of the light curtains indicated that 99 per cent of the test organisms were killed as they passed through the light barrier.

3. *Barrier Unit*: Designed by James A. Reyniers,<sup>21</sup> the barrier unit contained 12 completely closed cubicles, provided with individual air conditioning. They were subdivided into an inner or infants' section and an outer or nurses' section. Each section had its own air intake and exhaust. The nurse entered the outer section, prepared for the care of the

infant, raised the sliding glass partition not higher than to her shoulder level, attended the infant then lowered the partition. A greater air pressure was maintained in the infants' section so the flow of air was toward the nurses' section whenever the partition was raised.

Before the new nurseries were constructed at The Cradle, there were 68 cases of cross-infection of the respiratory tract during the two previous years, compared with only 17 for a two year period afterward, a decrease from 14.5 to 4.6 cases for every hundred infants admitted. Of the 17 cases, 15 were in the control unit, one in the light unit and one in the barrier unit.

### Tests Confirm Results

Bacteriologic tests further confirmed the results, although the clinical observations were decisive.<sup>19</sup> These investigators concluded the air conditioning of itself, as used at The Cradle, did not prevent cross-infections of the respiratory tract but did when combined with germicidal light barriers or mechanical barriers.

Deryl Hart and his associates, working at Duke Hospital,<sup>22</sup> emphasized the importance of bacterial air contamination from respiratory passages in the operating room. They have shown that all operating rooms during occupancy are heavily contaminated with pathogenic bacteria, predominantly staphylococci (more than 90 per cent). The flora, however, may vary in character, the highest air contamination occurring in general during the winter and being dependent on the nose and throat flora of the carriers present.

Hart and his co-workers concluded, from studies on wound infections, that unless this air contamination is controlled adequately, it is the greatest source of danger to the large open wound in modern operating rooms. "Unexplained" infected wounds have been almost eliminated in the Duke Hospital by disinfection of contaminated air by ultraviolet radiation. The rate of increase of air contamination is far less in the well-ventilated, air-conditioned room than in the poorly ventilated, non-air-conditioned room.

Considerable work has been done to show how bacteria and viruses are transmitted through the air. They, for example, can be contracted by one individual from another through



the air only if suspended for a sufficient length of time and if enough virulence is retained to enable growth in a new host.

"Viable bacteria can be cultured from dust-free air several hours or even days after liquid cultures of organisms have been atomized into it,<sup>23</sup> and susceptible animals can contract disease by breathing such an atmosphere."<sup>24</sup> During sneezing or speech, droplets of moistures, varying greatly in size, are sprayed into the air. Large droplets sediment rapidly, but air resistance strongly retards the rate of fall of small droplets.

The following formula indicates how large droplets fall at a velocity practically independent of droplet size:<sup>22</sup>

$$v = v_0 + gt$$

$v_0$  = initial downward velocity  
 $g$  = acceleration of gravity  
 $t$  = time of fall

Smaller droplets, however, are entirely different. A droplet 0.001 mm. in diameter would require 16.6 hours to fall 2 m.; one 0.1 mm. in diameter, 6 seconds; a drop 1 mm. in diameter, 0.6 second. The smaller the droplets the more air resistance retards their fall. This is expressed by the formula:<sup>22</sup>

$$v_s = \frac{2}{9} \frac{r^2 g p}{n}$$

$r$  = radius of droplet  
 $p$  = density of droplet  
 $n$  = coefficient of viscosity of air at given temperature and pressure

These formulas are for droplets that remain constant in size and do not evaporate. Under normal atmospheric conditions, however, evaporation occurs from the surface of each droplet and is proportionate to the droplet area, further reducing the droplet size and extending the time of suspension. The rate of decrease in volume is, therefore, greater for small droplets than for large ones, because the ratio of area to volume is greater:<sup>22</sup>

$$\text{area/vol.} = \frac{4\pi r^2}{\frac{4}{3}\pi r^3} = \frac{3}{r}$$

"Small droplets decrease rapidly in size and may evaporate before they have had time to sediment out of the

air. Any bacteria carried by the droplet before evaporation will remain in the atmosphere, together with dissolved substances in the form of minute droplet nuclei. It is in this form that they can remain for long periods subject to Brownian movement, without appreciable sedimentation."<sup>22</sup>

As the scientific information available indicates the importance of bacteria in the air as related to air-borne respiratory and virus diseases, it behooves hospital authorities in the medical management of hospitals to take every step necessary for the protection of patients against this previously unrecognized or understressed serious hazard.

Because the hospital represents a concentration of patients with known respiratory and virus infections, it becomes a matter of first importance in the hospital field to make the environmental air as safe, clean and pure as is possible in the light of modern scientific knowledge. This applies particularly to the new-born, who are first exposed to this hazard.

Air sanitation will find its greatest reward in the reduction of illness and mortality of the new-born, particularly in the light of certain evidence that epidemic diarrhea of the new-born may be due to a virus or filtrable agent,<sup>25</sup> which presents opportunity for transmission by air-borne routes.

### Respiratory Disease Increases

In recent years an increasing incidence of "upper respiratory diarrheas" or "intestinal flu or grippe" has occurred in epidemic proportions in adults, children and new-born. Its widespread, precipitous or gradual onset, geographic distribution and seasonal prevalence suggest possible air-borne routes. It has been observed in hospitals, sometimes affecting personnel, patients or both, and also in hotels, stores, factories, resorts and any place where groups of people are in close contact.

Whether epidemic diarrhea of the new-born is the same disease as that occurring in the infant has not been shown. The occurrence of the latter, however, during epidemics of the former in adults has been noted. In any event, the importance of possible air-borne routes for the transmission of gastrointestinal disease cannot be overlooked. The consequence of air sanitation in the hos-



pital becomes doubly significant, therefore, in view of air-borne respiratory diseases as well.

Various bactericidal agents for the sterilization of air have been investigated. "The bactericidal effects of ultraviolet radiation on microorganisms suspended in air have proved to be of a higher order of magnitude than humidity, ozone or commercial germicides."<sup>34</sup>

#### Humidity Is Basic Factor

It is of further interest to note that "humidity becomes a basic factor governing the bactericidal effect of ultraviolet radiations on bacteria suspended in air, the killing power for low humidities being manifold that observed at higher humidities."<sup>26</sup>

However, "more accurate determination of the critical lower limit of relative humidity is desirable. Ultraviolet irradiation, propylene glycol vapor, as reported by Robertson and his colleagues<sup>27</sup> and now hypochlorite solution, all appear to exert bactericidal and bacteriostatic effects on the atmosphere of closed air spaces.

"The experimental methods for controlling the factors involved are now available so that it remains only to choose what method or combination of methods can be most effectively employed in actual practice."<sup>28</sup> Of the glycols, triethylene glycol appears more satisfactory than propylene glycol according to recent studies, being effective in much lower concentration.<sup>29</sup>

The Wellses,<sup>30</sup> with Wilder, carried out a four year study in the Germantown Friends' School and a one year study in the Swarthmore public schools. They stated that as a result of ultraviolet irradiation there was no epidemic spread of contagion among the highly susceptible groups of children of primary schools, although epidemic spread occurred among less susceptible groups of older children in the departments of schools whose atmospheres were not irradiated. Their experiment corroborated the theory that epidemic contagion is spread through the medium of confined atmospheres and that it can be prevented by radiant disinfection of air.

Del Mundo and McKhann<sup>31</sup> reported that "the hospital infection rate during the winter of 1939-1940 in a central ward of the Infants'



Hospital of Boston was 12.5 per cent, but in a ward in which the conditions were entirely comparable except that each cubicle was protected across the front and across the top by ultraviolet radiation the cross-infection rate was 2.7 per cent. Sommer and Stokes<sup>32</sup> found that ultraviolet radiation was effective in reducing the number of air-borne organisms in a hospital ward."<sup>34</sup>

Recent experimental use of ultraviolet radiation as a means of air sterilization in the Arnold Pavilion of St. Luke's Convalescent Children's Hospital near Greenwich, Conn., has been favorable.<sup>33</sup>

Authoritative opinion states that ultraviolet rays vary greatly in their sterilizing efficiency with wave length. Rays longer than 3000 A are relatively inefficient; efficiency increases rapidly with decreasing wave length until about 2600 A, where it reaches a maximum, decreasing again to 2300 A and rising toward another maximum below 2200 A. Low-pressure mercury-vapor discharge tubes, which yield a large part of their radiant energy in the resonance line 2537 A, are particularly good for this purpose.<sup>22</sup>

Thus, artificial sunlight can be brought into hospitals and human dwellings to perform the task accomplished by nature on the outside: the sterilization and purification of air, land and water.† Temperature, furthermore, has practically no effect on the death rate by ultraviolet. The cause of death is a photochemical reaction of some cell constituent.

In the practical application of ultraviolet radiation, it is important to distinguish between clumps and individual organisms, dust and droplet nuclei. Experts indicate that air purification methods that depend on filtration or sedimentation may be more effective against dust and ultraviolet rays may be more effective against nuclei, the two being complementary and, therefore, effectively combined.<sup>26</sup>

†Prior to installing ultraviolet lights, reference should be made to the Council on Physical Medicine of the American Medical Association, which has evaluated the efficacy of various ultraviolet lamps for disinfecting purposes.

This finding would support the value of combining ultraviolet radiation with an air-conditioning installation as recommended in the "Standards and Recommendations for Hospital Care of New-Born Infants, Full-Term and Premature," published by the U. S. Department of Labor, Children's Bureau, Publication No. 292, 1943. Every hospital administrator and physician responsible for the care of hospital infants should study carefully this valuable publication, which recommends the establishment of modern facilities the value and importance of which have been discussed in this article.

The evidence here presented emphasizes air sanitation in hospitals for the control of air-borne disease, a highly significant hazard in the present day hospital environment. The scientific means available for the control of these hazards have been stressed. The known principles of air sanitation have a fertile field of application to the environment of almost all existing hospitals of the country. A wide gap exists between present knowledge and its application to existing policies of medical management in the modern hospital. Medical administration must seek to bridge this gap as a public health endeavor.

#### Summary

Vital statistics indicate that an increasing percentage of infant deaths occurs among babies under 1 month of age. The least progress in reducing infant mortality has been made in the first day, the first week and the first month of life. This is becoming increasingly important to general hospitals, inasmuch as hospital births have increased 209 per cent during the last fourteen years.

The establishment and use of the suspect-nursery on the maternity floor is a new and unique technic available to medical management for the control of infectious diseases of the new-born, one of the three major causes of neonatal mortality. This mechanism utilizes long-familiar principles of preventive medicine, for it enables infants to be isolated who are suspected of being ill or who are in the incubation stage of disease.

It minimizes the possible exposure of well babies to contagion and enables proper steps to be taken for



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the control of incipient epidemics among the hospital new-born.

The principle of prevention is emphasized rather than that of treatment after an outbreak has occurred. The procedure after diseases are evident is generally well known, but the measures that ensure prevention are not generally recognized, yet it is here that the greatest social gains and saving of lives can be made.

The establishment of the suspect-nursery places emphasis on safety and service as an important principle of hospital management, financial consideration being of secondary importance, and illustrates the principle of flexibility in hospital planning and growth where new scientific discoveries require modifications of the hospital layout.

It is important, also, that the professional and medical administrative aspects of the maternity department be well defined, with fixed and well-recognized authority among responsible members of the medical and resident staffs. Architectural, mechanical and environmental factors are of paramount importance in the planning of the suspect-nursery on the maternity floor.

The technic of individual aseptic cubicle isolation is emphasized in the general care of the new-born infant, with resources for the sterilization of air by means of effective ultraviolet light radiation. Adequate facilities must be available for air filtration and the control of humidity, temperature and ventilation by well-recognized principles of air sanitation, eliminating pathogenic organisms in the atmosphere which, according to the available evidence, constitute such special hazards and are of such vital consideration where human beings exist in enclosed spaces.

Finally, medical administration in the hospital requires familiarity with the vital statistics of diseases, as well as an understanding of their epidemiology and importance to human welfare. It demands, in addition, a knowledge of recent advances in scientific research so that proper measures of control may be undertaken by modification of the hospital environment and establishment of appropriate procedures in current management, thus bridging the everlasting gap between scientific knowledge and its application to human health and welfare.

# The Acid Test of Practical Nursing

*Opportunities for the practical nurse are steadily expanding in every field of health service, but nowhere are her services so greatly needed as in the care of the chronic disease patient*

**MORRIS HINENBURG, M.D.**

Executive Director  
The Jewish Hospital  
Brooklyn, N. Y.

IT IS not unusual when a program for the care of chronically ill and long-term convalescent patients is under consideration to find few who realize that facilities for these patients must be essentially as complete as they are for the acutely ill patients.

The reasons for this are not complicated. Institutions that admit only chronic disease patients must try for success after others have failed and must be prepared to accomplish, within the limits of human ability, knowledge and sympathy, what the acute hospitals have volunteered to do for a comparatively short period only.

What contribution can the nursing field make to the development and achievement of a new order of care and service for these patients? What can the trained practical nurse bring into this field by way of training, attitude and technics that will serve to strengthen the weakness in this phase of our community health program?

## Job Analysis Necessary

The present shortage of professional nurses has compelled a job analysis of the services of this group and this analysis has established that numerous duties can be well performed by men and women who can bring intelligence and sympathy, reinforced by a much shorter period of training, to the efficient performance of these duties.

What many consider to be a newly developed approach to the problem is not a discovery but rather a re-discovery of what many small hos-

pitals, particularly those in rural areas, have known for some time. When the exigencies of war emphasized the difficulties growing out of nursing shortages in the large hospitals, those in smaller centers of population continued their function with fewer and less serious impacts on their nursing organizations.

The answer to this mystery was soon obvious. Practical nurses, trained on the job to perform definite duties or trained in well-established courses, were working alongside the professionally trained nurses to give balance and substance to a nursing program that had better chance for continuity of service to the patient than the ones in force in large urban hospitals.

Now that we are keenly aware of the types of nursing programs that are being evolved it is, I believe, safe to predict that the practical nurse will continue to find steadily expanding opportunities as a bedside nurse working in harmony with the professional nurse. The latter will continue to maintain in relationship to the patient a place that will utilize her education, training and experience to the fullest advantage.

Although the opportunities for the practical nurse will be present in every field of health service in which nursing is an important component, the areas that have proved to be most suitable for her are those related to the care of the aged, the tuberculous, patients suffering from nonacute cancer, chronic inflammatory and chronic degenerative diseases, the convalescent and mildly ill individuals who are incapacitated to the point at which they are unable to

care for themselves or be cared for by those whose hands may be willing but inept.

The need for the trained practical nurse is greatest in the care of chronic disease and convalescent patients whether in homes or in institutions.

The general plan of training now observed in approved courses provides adequate preparation for the practical nurse capably to undertake routine nursing care of these patients. As a student, her clinical experiences encompass a rotation of service that gives her the practical background for the acceptance of these responsibilities. One effective phase of this training is the emphasis placed on performing well the work for which the practical nurse is trained and omitting the assignment of duties for which she is unprepared.

## Meets Views of Nursing Leaders

The plan of training is fashioned to meet the views of nursing authorities that the professional nurse should care for a patient during the critical stage of illness and that the practical nurse can be used as her successor during the chronic or convalescent period.

The attitude of the practical nurse must be in consonance with the spiritual and physical status of the chronic disease or convalescent patient. Patients in need of this care have been sick for a long time. They are not only complex medical problems but difficult social and economic problems as well. Many of them are not hopeful of recovery and yet their hopes must never be allowed to wane.

The practical nurse who undertakes to serve these patients must by

From a paper presented to the National Conference of Practical Nurse Education, May 1944.



her attitude and action feed the instinctive hopes of the patients for recovery or improvement and must guard herself against the discouragement that may come about when a patient's response to treatment is slow or not in evidence.

It is important that the care of chronic disease patients be in the hands of men and women who will have more than a passing interest in them and who will recognize the right of the patients to the best that trained and intelligently sympathetic nursing care can give them.

#### Chronic Disease Isn't Glamorous

The problems of the selection and the organization of a nursing service are difficult. The glamour and the dramatic interest of the acutely ill patient are as attractive to the practical nurse as they are to the professional nurse and the physician. Chronic disease patients must not be penalized for the lack of a dramatic or interesting disease! Well-trained graduate nurses should form the group that will limit its duties to the technical nursing activities while the routine bedside care should be delegated to the practical nurses. Such an arrangement should be satisfactory to all elements in the nursing organization and the service should be adequate, well balanced and productive of the best results if everyone concerned possesses and practices the virtue of patience.

Diseases that require periods of prolonged convalescence offer a greater challenge to the medical world, to nurses and to those in allied fields than do the acute diseases, which for the most part, aside from operative conditions, are fairly successfully treated by nature, with physicians and nurses as intelligent assistants. The care of the acutely ill patient must, of course, be performed well for failure in the early stages of disease will add recruits to the growing ranks of the chronic disease army.

When nursing personnel is plentiful and when economic pressures are more exacting, chronic disease patients are assured of a greater share of the available nursing care. Under the prevailing conditions of shortages with economic barriers removed or nonexistent, chronic disease patients become the unattractive group for which a great deal of sympathy is expressed but whose nursing

needs, in large measure, go unheeded.

Nursing the chronically ill patient well is the acid test of nursing; that statement is, in my opinion, the best thought to keep in mind when we ask ourselves the question, "Do chronically ill and long-term convalescent patients need the trained practical nurse?"

The nursing technics required for these patients are rather unusual. Essentially they are a combination of practical management of the routine bedside care and the retraining of the diverse personalities that these patients develop as a result of the various stages of subnormal health.

To attempt to define all of the technics that the practical nurse would bring to the bedside of a chronic disease patient would require a recital of some 100 types of service. I shall mention just a few.

The practical nurse should have some knowledge of human anatomy as a basis for the intelligent performance of many of the bedside procedures. She should know something about the transmission of disease and the fundamentals of the measures for its prevention. She must possess the capacity to recognize the untoward symptoms of a patient although she may not have a basic understanding of their underlying causes. She must be capable of recognizing the effects of the nursing treatments that she administers. She must know how to maintain and preserve the decorum of the sick-room.

#### Keep Training Simple

It is important for the practical nurse to know well the technics learned in her course of training but to be free and unhampered by a mass of information for which she will have no use during the period of her nursing experiences.

Practical nurses should have training in recording the intake and output of fluids. The patient with a chronic heart disease may receive digitalis and diuretics that will stimulate the excretion of fluids accumulated in the body cavities. The patient may require diets limited in fluid or poor in salt and the practical nurse should be keenly aware of these limitations. She should be trained to administer insulin for diabetic patients requiring insulin therapy.

The practical nurse should be trained to observe the signs and symptoms of complications in bed-ridden patients. All of us can appreciate the serious results of the unnoticed and untreated bed sore. The observation of the practical nurse should be a matter of record and the clinical data for each patient should not be complete unless her observations are recorded with painstaking care.

In the days that lie ahead, it will be necessary for minds to get together to work out the fundamental relationships between the professional nurse and the practical nurse. What ratio shall prevail between the groups working together? Can we establish a ratio on the strength of our present experience and knowledge or does the subject require further study?

#### Where Will Practical Nurse Fit in?

What will be the rôle of the practical nurse in the nursing programs in health and welfare institutions of all types—the acute, the chronic, the convalescent, the public, the voluntary and the proprietary? Will the economic laws that govern the distribution of services and supplies influence the practical nurse to assume greater responsibility in meeting the nursing needs of the sick?

What steps need to be taken to recruit enough women of the right sort for training as practical nurses in preparation for bedside service? Will the relationships between the professional nurse and the practical nurse be so precise that rigid inflexibility will be the rule or will there be a degree of latitude within defined limitations that will permit these groups to work side by side in harmony, mutual understanding and respect?

The answers to these questions should be sought as quickly as possible to avoid what may otherwise develop into circumstances that are rich in confusion and misunderstanding and packed with potential harm to the sick, who must not be made innocent victims in a situation that is not of their making or understanding.

The thinking that must be done and the actions that must be taken should be inspired by cool, level-headed leaders whose capacity to act in the face of emotional and sentimental pressures will strengthen the approach to these problems.

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# HEADLINE NEWS

## \$13,000,000 Worth of Surplus Goods Sold by Treasury

By EVA ADAMS CROSS

WASHINGTON, D. C.—The Surplus Property Act became effective December 16 with confirmation by the Senate of the President's appointees, Hurley and Heller, to the Surplus Property Board. Senator Guy M. Gillette is slated for the third place on the board and as chairman.

Surplus war property at the war's end is estimated to be approximately \$100,000,000,000. The four disposal agencies, Reconstruction Finance Corporation, the Procurement Division of the Treasury Department, U. S. Maritime Commission and War Food Administration, held inventories October 31 totaling \$708,737,000. The War Department continues to be the largest source of surplus war property.

The Treasury Procurement Division accounted for more than \$13,000,000 worth of the total disposals in October. Surpluses ready for disposal in October by Treasury Procurement included: miscellaneous manufactured end products, chiefly surgical and medical supplies (\$7,600,000); furniture and fixtures (\$3,500,000); drugs and medicines (\$2,900,000).

In hearings held before the Senate committee on small business in mid-December to inquire into the methods followed by the Treasury in the disposition of surplus consumer goods, this agency listed some 78 classes of property. The majority listed are in great demand.

The chief of the research division of the Treasury Procurement told the committee "we are told that large amounts of surgical instruments are going to be declared surplus"—a surplus which might represent as much as two years of normal production of surgical instruments.

## House Refuses Funds

WASHINGTON, D. C.—Congressional funds amounting to \$75,900,000 for blueprinting needed public works were denied December 6 by the House appropriations committee. The Federal Works Administrator had said that hospitals would be among federal works projects to receive first consideration in postwar planning. The recommendation of the Chief Executive will be reintroduced when the new congress convenes.

## Winners of The Modern Hospital Architectural Competition Announced

Fisher and Fisher, architects, of Denver, and Lunden and Dixon, architects, of Los Angeles, were picked as the winners of the first prizes of \$1000 each in The MODERN HOSPITAL architectural competition by the judges who met in Hampshire House, the nurses' home of Wesley Memorial Hospital, Chicago, on December 11 to 13. The Denver entry was for a 40 bed general hospital and the Los Angeles entry was for a community health center incorporating a 40 bed general hospital.

A total of 77 designs was submitted in the competition.

Other prize winners were as follows:  
*Small General Hospital*

Second prize (\$750): Basil Yurchenco, Harvard Graduate School of Design, Cambridge, Mass.

Third prize (\$500): H. P. VanArsdall, architect, Cincinnati.

Honorable mentions (\$100 each): Robert J. Reiley, architect, New York City; Janet and Milton H. Caughey, architects, West Los Angeles, Calif., and George Blumenauer and Associates, architects, and Paul H. Fesler, hospital administrator, Oklahoma City, Okla.

*Community Health Center*

Second prize (\$750): Roslyn Ittelson, designer, and Leonard Greenburg, M.D., public health officer, New York City.

Third prize (\$500): Fisher and Fisher, Denver

Honorable mentions (\$100 each): Laurence P. Johnston, architect, Evanston, Ill.; E. Todd Wheeler, architect, Wilmette, Ill.; L. Forster, architect, Toronto, Ont.

In addition the jury picked out four other hospital designs to which special commendation was given but no prizes. These designs are by David Aaron, Institute of Design, Chicago; Harrison Gill, architect, Chattanooga, Tenn.; John C. Harkness and Charles D. Wiley, architects, Washington, D. C., and Edward J. Toole, architect, Hingham, Mass.

The judging was carried on by a jury composed of Marshall Shaffer, chairman, chief hospital architect, U. S. Public Health Service, Washington, D. C.; Dr. Fred G. Carter, administrator, St. Luke's Hospital, Cleveland; Graham Davis, hospital consultant, Kellogg Foundation, Battle Creek, Mich.; Mies van der Rohe, professor of architecture, Illinois Institute of Technology, Chicago; Nathaniel A.

Owings, architect, Chicago and New York City, and Addison Erdman, architect, New York City. Carl A. Erikson was architectural adviser.

The jury made a general report on the entire competition and specific reports on the individual prize-winning entries. The individual reports will be published along with the plans in the March and April issues. The general report is as follows:

"1. A 40 bed hospital is, perhaps, the most difficult design problem that could be given to the contestants. It is neither a very small job nor a large complete hospital. Hence, it requires the most careful planning to include everything that is necessary and yet to keep capital investment and operating expenses under control.

"2. The jury was inclined to stress ease of operation and a minimum requirement of personnel in so small a hospital. In the light of this emphasis, many excellent plans, thoroughly developed in all details, could not be given  
(Continued on Page 68)

## Dingell Seeks Early Hearing on Health Bill

WASHINGTON, D. C.—Promising soon to submit a comprehensive plan for broadening and improving the social security system, the President signed December 16 the bill which holds the old age insurance pay-roll taxes at 1 per cent each on employer and employee for at least another year. A. J. Altmeyer had urged an increase now.

Backed by the A. F. of L. and C.I.O., Senator Wagner, sponsor of the original Social Security Act in 1935, fought the proposed freeze. Representative Dingell of Michigan has announced that he will seek a full hearing early in the new Congress on the Murray-Dingell Bill which has been pending for a year and a half and which proposes among other things to establish a federal system of medical and hospitalization benefits. Moreover, it would extend coverage to some 20,000,000 persons now unprotected—agricultural workers, domestics and persons in nonprofit institutions.

It is reliably reported here that three other social security bills will be introduced early in 1945, Senator Pepper being the sponsor of one.

## Recommend Higher Compensation for Illinois Hospitals

The advisory committee to the Illinois Public Aid Commission recommended on December 13, and the commission has adopted, a proposal that the commission pay hospitals for the care of recipients of old-age assistance and blind assistance on a basis similar to the E.M.I.C. program but at 85 per cent of the E.M.I.C. reimbursable rates.

This will probably give Illinois hospitals reimbursement at a little less than cost for these patients but the rate is higher than the amount now being received from welfare agencies.

It is expected that most of the hospital bills under this new program will be paid by the commission itself rather than by local welfare officials. Father John W. Barrett, diocesan director of Catholic hospitals, Chicago, is chairman of the hospital advisory committee.

## Approve Applications for Nursing Facilities

WASHINGTON, D. C.—Between 14,000 and 15,000 nurses' beds will be available as a result of construction applications for new nurses' homes, the U. S. Public Health Service estimated on November 15.

Two hundred and forty-one applications, representing about 13,088 nurses' beds, have been approved by the President for Lanham subsidy. Of these 160 include training facilities; 81 are for housing quarters only; 172 provide for construction, and 69 for purchase, lease or renovation of existing buildings.

Federal funds provided totaled \$17,317,369; applicants' contributions, \$8,106,913; the total cost was \$25,424,282. These figures cover the period from September 1943 to Nov. 1, 1944, which dates mark the beginning and end of the time during which Lanham funds were available for projects connected with the Bolton Act.

During this same period, besides these Lanham projects, a limited number of applications for priorities only has been filed with the War Production Board in connection with nonfederally financed facilities for student nurses. About 50 such applications have been cleared with the U. S. Public Health Service. Of this number, approximately 40 applications, involving almost 1500 nurses' beds, were endorsed by the district offices of the Public Health Service following field investigation. Approximately 30 of these applications, providing about 1000 nurses' beds, have been accorded priorities for construction by W.P.B.

## Somervell Reports on Activities of Army Service Hospitals

By EVA ADAMS CROSS

WASHINGTON, D. C.—More than a third of the nation's medical personnel and facilities have been mobilized in the Army Medical Corps to look after the health of the men and women in the Army, says Lt. Gen. Brehon Somervell, commanding general, A.S.F., in a report made public recently.

During 1944, the report declares, 100,000 patients were evacuated from overseas, of whom about 90 per cent were returned by sea. The Army had 17 hospital ships in service by the end of the fiscal year and 11 under construction for delivery within a few months. On June 30, 1944, the Army Service Forces had in operation 60 general hospitals scattered throughout the United States with a total capacity of 100,000 beds.

Of the 60 hospitals, 44 specialized in particular treatment; 19 were neuropsychiatric centers; 18, neurosurgery; a limited number specialized in radium therapy, others in plastic surgery, and some in ophthalmologic surgery.

## St. Louis Plan Starts Negro Health Work

To carry on health education work among the 180,000 Negroes of St. Louis, Group Hospital Service has employed Mrs. John T. Clark, former dean of women and associate professor of Stowe



Teachers College, St. Louis. She joined the public education department to work with Negro groups.

Another interesting development was the transfer by Group Hospital Service of more than 4000 contracts covering approximately 9000 persons from its plan to the Group Hospital Service of Kansas City. The boards of trustees of the two plans reached agreement on this transfer in the belief that the residents could be better served from Kansas City.

## Five Year Health, Sanitation Program Launched in Liberia

WASHINGTON, D. C.—An all-Negro mission of 11 Americans will launch a five year health and sanitation program in Liberia, West Africa, the U. S. Public Health Service announced November 21.

Created by the U.S.P.H.S. in cooperation with the State and War departments, the mission includes physicians, nurses, entomologists and engineers. The division of cultural cooperation, Department of State, is contributing funds to be used for the improvement of nursing education, a program which will be under the jurisdiction of the mission. Fellowships for the medical training of Liberians in this country will be provided by the Rockefeller Foundation.

The nursing education program will include instruction in bedside nursing and public health nursing, including midwifery. In addition, training will be provided for hospital attendants, medical practitioners and attendants.

Dr. John Baldwin West, senior surgeon, U.S.P.H.S., formerly a major in the Army Medical Corps, heads the mission.

## Cinchona Trees Discovered

WASHINGTON, D. C.—From the Office of the Coordinator of Inter-American Affairs comes the news that Peruvian explorations for cinchona trees, source of quinine, are reported to have located stands in forest areas extending over 28,000,000 acres on the eastern slope of the Andes. Simultaneously, Peru has begun a broad program of reforestation in the Tambopata Valley, source of the richest and most valuable cinchona in this country.

## Nursing Scholarships Given

WASHINGTON, D. C.—Gift scholarships for student nurses, totaling \$226,772.55, are listed in a "Report of Campaigns, 1943-44" that has been received from the General Federation of Women's Clubs. The program was undertaken in cooperation with the American Red Cross and the National Nursing Council for War Service. Every state in the Union, as well as Alaska, made sizable contributions, California leading all the rest with almost \$40,000. Among other states making large donations toward nursing education were Michigan, Missouri, Pennsylvania and Texas. Loan scholarships were made by 25 states and the District of Columbia. This sum amounted to \$41,061.35.



## Navy Establishes School to Train for Air Evacuation

By EVA ADAMS CROSS

WASHINGTON, D. C.—Establishment at Alameda, Calif., of the Navy School for Air Evacuation of Casualties was announced December 12 by V/A Ross T. McIntire, surgeon general of the Navy.

Launched in mid-December, the school's first class consisted of 24 nurses and 24 pharmacist's mates. Upon completion of training, which will include flight indoctrination within the continental limits, the nurses and hospital corpsmen will report for duty with an air evacuation task unit with the fleet in the Pacific.

In addition to its regular flight and ground personnel, each 12 plane squadron will operate with the following medical personnel: one flight surgeon, 24 flight nurses, one hospital corps officer, 24 pharmacist's mates.

## Public Favors Health Care Under Social Security

Sixty-eight per cent of the public favors extending social security to cover doctor and hospital care and 67 per cent would be willing to pay \$3 a month if complete doctor and hospital care could be assured for themselves and their families any time in the future. These facts were revealed in a national survey completed by the National Opinion Research Center of the University of Denver and published on November 18.

The survey, made in collaboration with the Physicians' Committee on Research, Inc., New York City, also shows that 55 per cent would rather pay doctor insurance in advance, while 58 per cent think it is a good idea if 2½ per cent were taken out of people's pay checks for social security in place of the present 1 per cent, to pay for this service.

Of those who hold any opinion on the subject, 64 per cent prefer the social security method to private insurance plans. Of all persons surveyed, 41 per cent approved the Wagner-Murray-Dingell Bill (51 per cent of those with opinions).

## Red Cross Seek Aides

WASHINGTON, D. C.—The Red Cross appealed December 1 for 29,691 additional volunteer nurses' aides to meet immediate hospital needs. The District of Columbia needs 250 daytime aides; Maryland needs 217 daytime aides and 107 evening aides, and Virginia wants 444 daytime aides and 75 evening aides. Quotas are based on estimates by local chapters of hospitals all over the United States.

## Physicians Express Divergent Views on Compulsory Health Insurance

WASHINGTON, D. C.—Sharp differences of opinion on compulsory health insurance were expressed at a conference on problems of medical care held here on December 8 and 9. Marjorie Shearon of the U. S. Public Health Service, speaking as an individual, said that any attempt to cover 90 per cent of the population with compulsory health insurance would destroy private practice.

Dr. Franz Goldman of the Yale University School of Public Health, on the other hand, told the 150 delegates that the American people could get far better medical care for the money they are now spending if payments were regulated under a national health plan. Doctor Goldman criticized Blue Cross plans for inadequate coverage.

The meeting was held under the sponsorship of the Physicians' Forum, a group of liberal doctors who oppose the A.M.A. policy on medical care.

Taking sharp issue with the "isolation-

ists" in medicine, Dr. Ernest P. Boas, chairman of the Physicians' Forum, called for a cooperative effort among physicians, labor and consumer groups to map out a program that would ensure high quality medical service at an equitable cost. Doctor Boas is assistant clinical professor, College of Physicians and Surgeons, Columbia University.

Fundamental research is likely to provide economies in the distribution of medicine as well as to improve the quality of medical care, according to Dr. Alan Gregg, director of medical sciences for the Rockefeller Foundation. He urged adequate pay and freedom for research workers in any national health program but stressed that fundamental medical research should be connected with clinical work.

Representatives of the Army and of consumer, medical, labor, business, public health and welfare groups attended the conference.

## Hearings on Medical Research

WASHINGTON, D. C.—Hearings on the rôle of the federal government in promoting research in health problems were held December 14 and 15 before the Senate Subcommittee on War-Time Health and Education. The federal government has mobilized and financed medical research on a large scale in this and other wars because of its great importance in national defense and in the conduct of the war. The question brought up in the hearings was whether the federal government should continue in time of peace to offer assistance through grants to universities and in other ways to facilitate progress against disease through research. Many medical authorities presented their views at the hearings.

## Shift Medical Corps Command

WASHINGTON, D. C.—Y/A Ross T. McIntire announced November 20 the appointment of Capt. William J. C. Agnew as assistant chief of the Bureau of Medicine and Surgery. Captain Agnew succeeds R/A Luther Sheldon Jr., who has held the post since June 1940. Admiral Sheldon will be medical officer of the Fifth Naval District at Norfolk, Va. Another shift brings to Washington R/A George C. Thomas who will head the newly established professional division in the Bureau of Medicine and Surgery. This division contains the hospital branch.

## Urge Perpetuation of O.S.R.D. After the War

WASHINGTON, D. C.—That the Office of Scientific Research and Development will go out of business after the war seems unlikely from the interim report November 24 of a House select committee. Hearings were begun November 21 before this committee on the subject of postwar research and development. Since they were not completed by the 78th Congress the hearings will probably be continued in the new congress.

President Roosevelt's letter to Vannvar Bush, director of O.S.R.D., and the urgency of Army and Navy testimony will exert pressure for the postwar establishment of an independent research agency or the transferral of the Office of Scientific Research and Development to an old line agency.

## Conventions to Be Curtailed

The convention curtailment program of O.D.T. is to be continued during the first quarter of 1945 it was announced on October 27 by E. J. Connors, assistant director. Convention-holding organizations were asked to cancel any meetings scheduled before April 1. Hotels were urged to warn delegates to conventions held in spite of the government request that they cannot guarantee reservations as "military and civilian travelers serving the war effort must be accommodated first."



## Architectural Contest Winners Announced

(Continued From Page 65)

awards because the jury thought that they would be uneconomical in operation.

"3. Throughout the plans submitted there were an unusually high level of design shown by the contestants and, generally, a surprisingly good grasp of the elements and organization required in hospital planning. This indicates that there are many competent architects who are interested in hospital design who have no previously established national reputation in this field.

"4. The trend of exterior design was definitely toward modern work. Functional and asymmetrical plans, flat roofs, extensive fenestration, careful orientation, flexibility in planning, economy of materials (particularly in the elimination of unnecessary exterior decoration) indicate this trend. However, the jury itself was well balanced between the traditional and the modern in design and each type had a fair hearing.

"5. Curiously enough only one of the first twelve prize winners was associated with a hospital consultant. None of the four entries receiving special commendation (but no prizes) had a hospital consultant as a part of the team."

It was also pointed out that the West, Middle West, South, East and Canada were all represented among the prize winners. No entries from outside the United States and Canada were received before the judging began.

## Approves Veterans Hospital

WASHINGTON, D. C.—The recommendation of the Federal Board of Hospitalization that 300 acres of ground and school facilities at Tomah, Wis., be turned over to the Veterans Administration for use as a neuropsychiatric hospital was approved by the President November 30. The Veterans Administration plans to build a 1328 bed hospital costing \$4,880,000 on this site. The hospital will serve parts of Wisconsin, Iowa and Illinois.

## New House Organ Issued

The first issue of the *Lamp* was published recently by the Norwegian-American Hospital in Chicago. The seven page booklet is devoted to the interests of the hospital and the first issue for December and January contains news notes about new and former staff members, the activities of the women's auxiliary and an article on colds by Dr. Eugene Kronmiller, medical resident.

## Urges Recruiting of Women as Medical Students

WASHINGTON, D. C.—Medical schools and colleges should engage immediately in a recruiting campaign to enroll women students to help meet the impending serious shortage of trained medical personnel, Dr. Martha M. Eliot, associate chief, Children's Bureau, declared in a recent statement.

In some medical schools the quota systems, which have limited the number of women accepted to a certain proportion of the men students admitted, are being done away with, Doctor Eliot pointed out. It would be well, she urged, if all schools would modify their admission requirements in this same way. Furthermore, scholarships should be offered to women. It was considered a good investment to send young men to medical schools at public expense. Is there any reason, the associate chief of the Children's Bureau asked, why financial help should not also be extended to our young women?

Many women, she believes, would be willing to go into the rural areas where doctors are so badly needed, if hospitals and health centers could be made available.

## Gas Mask for Head Injuries

WASHINGTON, D. C.—A gas mask developed by the chemical warfare service of the Army to protect head wound patients from war gas is now in production. It is designed for use in hospitals or other places which are subject to gas attacks and which contain patients with bandaged heads, faces or jaws. The mask consists of a silk-like plastic hood to which an air purifying canister and an outlet valve are attached. The mask is pulled over the head like a sack, a flexible window providing clear vision.

## Interest in Labor Dispute Grows

Because of its serious implications, the labor dispute involving four New York hospitals, in connection with which the War Labor Board has recently issued a directive order, is attracting nationwide interest. At a recent directors' meeting, the New York State Hospital Association voted to submit application to appear at the proceedings as a friend of court. Such a request was made previously by the Greater New York Hospital Association. In addition, the American Hospital Association has advised the New York group that through its Council on Government Relations it would take any steps necessary for the best interests of the entire hospital field.

## Army Nurse Ratio Is 1 to 22 Patients

Although the Army Nurse Corps has an authorized ratio of 1 nurse to 15 patients in the United States and 1 to 12 overseas, the present supply of nurses is sufficient to maintain only about 1 to 20 or 22 in this country, according to a statement on November 27 by Virginia M. Dunbar, director of the nursing service of the American Red Cross. This statement, together with much other material on the shortage of nurses in the Army, was circulated by the National Nursing Council for War Service.

"More than 50,000 nurses out of a profession with some 265,000 active members have already volunteered for Army and Navy service," states Elmira B. Wickenden, executive secretary of the council. "Nurses are doing their part in a big way. But the public, doctors and hospital administrators must cooperate more extensively in substituting more nonprofessional care on the home front. We must continue to press all nurses to enter essential positions and those classified as 1A to enter service. But hospital administrators should be careful not to use the fact that a few nurses are derelict in duty as an excuse for not releasing enough of those who want to join the Army or Navy."

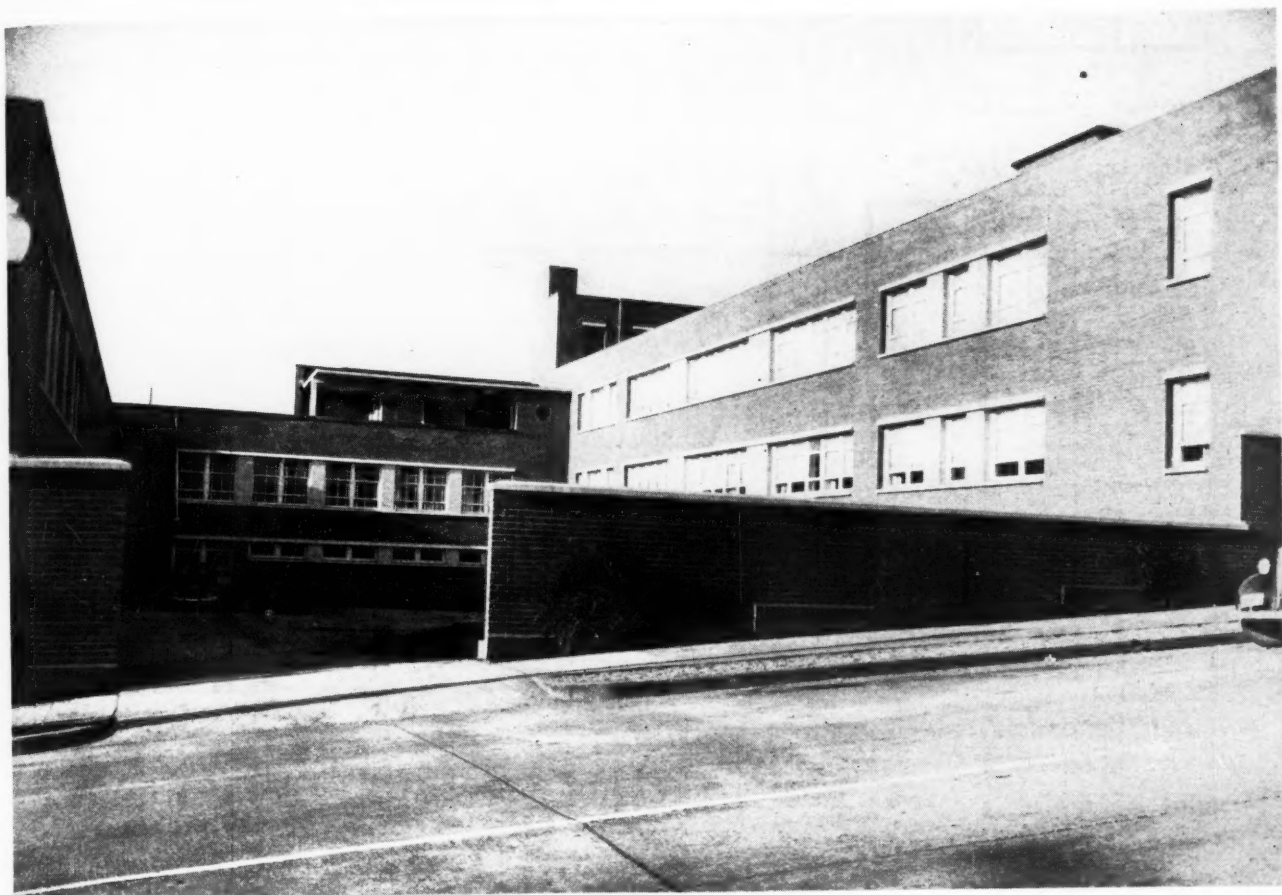
In connection with the drive, Maj. Gen. Norman T. Kirk called attention to the fact that nurses serving in the Army are gaining priceless experience that will put them in the foremost ranks of their profession after the war.

## Evanston Seeks \$500,000

Evanston Hospital, Evanston, Ill., announced December 14 the start of a \$500,000 fund-raising campaign to provide needed additional bed space and facilities for an expanded program of medical education in collaboration with Northwestern University. The announcement was made at the time of the annual meeting by Robert T. Sherman, president. Mr. Sherman also announced that \$20,000 toward the goal had already been received.

## Wisconsin Group to Meet

The annual mid-winter conference of the Wisconsin Hospital Association will be held January 18 at Hotel Schroeder in Milwaukee. Hospital personnel, administration, postwar planning and public relations will be discussed. Featured speakers will be Dr. Peter Ward, newly elected president of the A.H.A., and Graham Davis, hospital director of the W. K. Kellogg Foundation.



## The Doctors Built It To Bring Patients Back to Health

**GEORGE W. STODDARD**

George Wellington Stoddard and Associates  
Architects and Engineers, Seattle

A NEW 200 bed hospital was opened in Seattle in mid-October. It is owned by the King County Medical Service Corporation and is fittingly called the Doctor's Hospital.

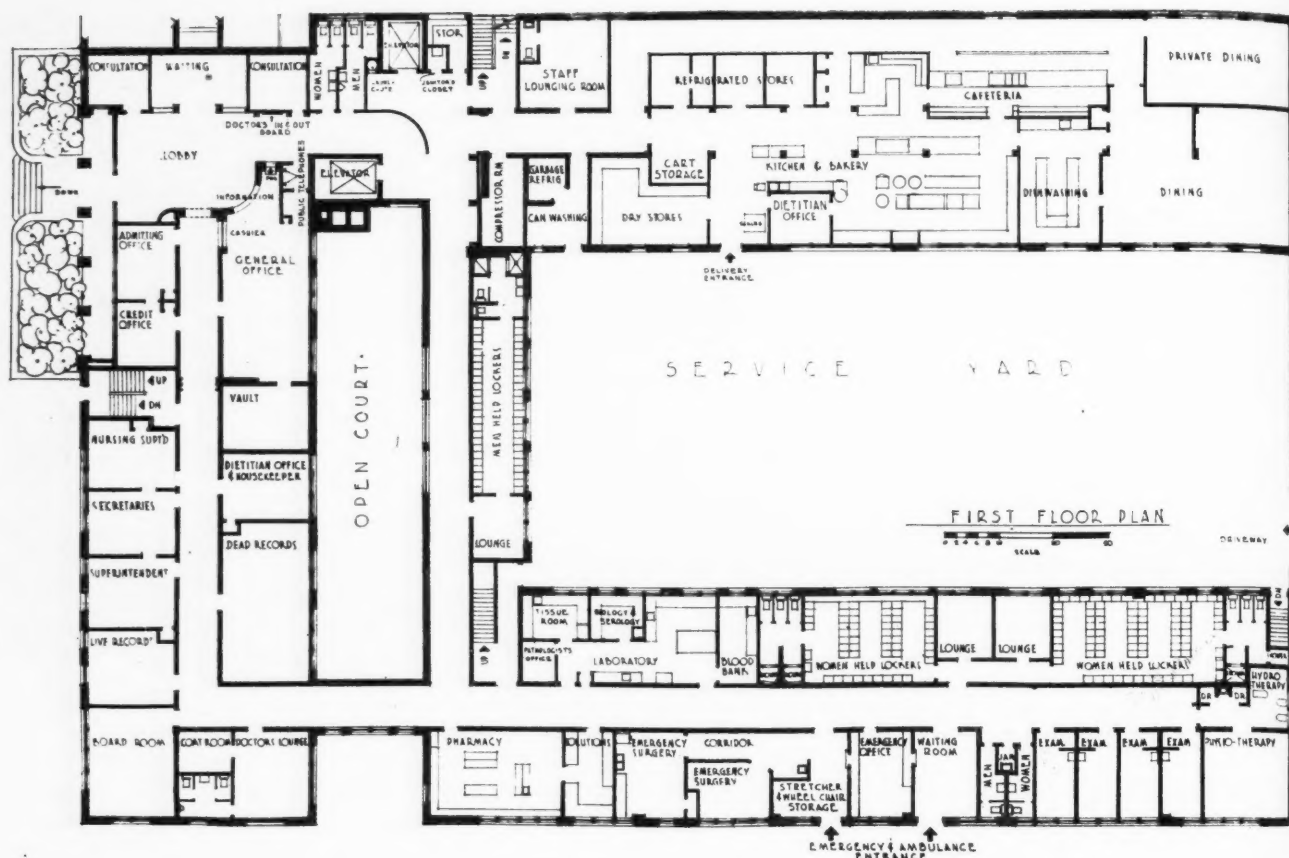
The building is centrally located within a few blocks of most of the other large hospitals in the city and is only five or six blocks from the central business district. Although the site was limiting in that it was on a hillside, ingenious advantage was taken of this fact by the use of staggered levels, making it possible for the maximum number of the rooms to command a view of Puget Sound, with the beautiful Olympic Mountains as a backdrop.

Because of war-time restrictions on the use of reinforced concrete and elevators, a horizontal plan was absolutely imperative. This enabled the architect to place the various entrances in the wings to which they

Above: View of the kitchen service court showing one solarium with a portion of the sundeck above it. Right: A section of the main lobby which is entered from a quiet secondary street.







Above: Plan of the first floor showing the entrances to the emergency department and the service wing. All administrative offices, the pharmacy, minor operating rooms, examining rooms and the kitchen, cafeteria and dining rooms are on this floor. Opposite Page: The second floor houses the maternity and obstetrical department and the medical department. The nursery lies between the obstetrical and nursery wings. Two rooms where visiting obstetricians may rest have been provided.

belong. The entrance for the delivery of all heavy goods and fuel was placed in the basement level; the emergency and doctors' entrance, in the emergency wing, and the food delivery, in the kitchen wing.

The main entrance is on a quiet secondary street. Above the entrance, between high columns, are five cast stone sculptured panels depicting in simple, stylized form some of the functions carried on in the hospital. Parking space for this main entrance is taken care of by the development of property immediately west of the emergency and doctors' entrance.

Doctor's Hospital was designed to bring patients back to health. This thought was uppermost in the mind of the architect and is demonstrated by the use of rows of large windows, a cheery and varied color scheme and sound deadening. The rooms are placed so that all will receive sun some time during the day. Each is lined with a row of large, low windows and is decorated with colorful print draperies and upholstered chairs in a contrasting color. Every attempt has been made to make the rooms seem as home-like as possible.

The nursery walls are painted pink, so that the babies may be admired in a complimentary setting.

Large solariums are provided off the elevator corridors on the second and third floors. These have windows to the south, with exterior walls of glass brick and natural red brick. The interior walls are of pale green, end walls are taupe and the ceilings are peacock green. Bamboo furniture is used in these rooms.

Sound deadening is an added comfort and is provided in the labor and delivery rooms, pediatric suite, offices, the main lobby and all rooms next to utility and other work rooms.

An unusual feature of this new hospital is the emergency wing, with its separate entrance. This entrance is the one through which all the doctors, employes and emergency cases are checked in and out. In this wing are four examining rooms for the convenience and use of doctors on emergency cases at times when their own offices are unstaffed. This service eliminates the necessity for confining patients to the hospital until after an examination has been made. Also included in this wing are the

blood bank, pharmacy, laboratory and emergency operating rooms.

The elevator lobby forms the hub of the main plan. It is adjacent to the main entrance on one side and to the food preparation department on the other, while corridors from all wings, on all floors, converge here. It is here that the advantage of the horizontal, rather than the vertical, plan is made plain. The rapid transportation of food, supplies and passengers is assured by the fact that the elevators do not have to travel through many floors.

The basement is equipped with a complete laundry, since local laundries are unable to handle more work during the war emergency. Although it is located below ground, the slope of the site made it possible to provide these laundry rooms with many windows and adequate ventilation. A large storage room is another convenience to be found in the basement.

On the second floor are the maternity wing and obstetrical department. The patient's convenience was again



the major consideration in planning the location of nursery, maternity rooms and obstetrics department. The elevator corridor leads directly to the obstetrics department where the patient is confined in one of the three labor or two delivery rooms until she is delivered. Then she is taken into the maternity wing to her room. The nursery lies between the obstetrics and the maternity wings, but a door bars the public from the obstetrics department.

Included in this set-up are two sleeping rooms for waiting obstetricians, connected to locker room, bath and obstetrics department by a pri-

ivate corridor. This department has its own sterilizing, work and preparation rooms.

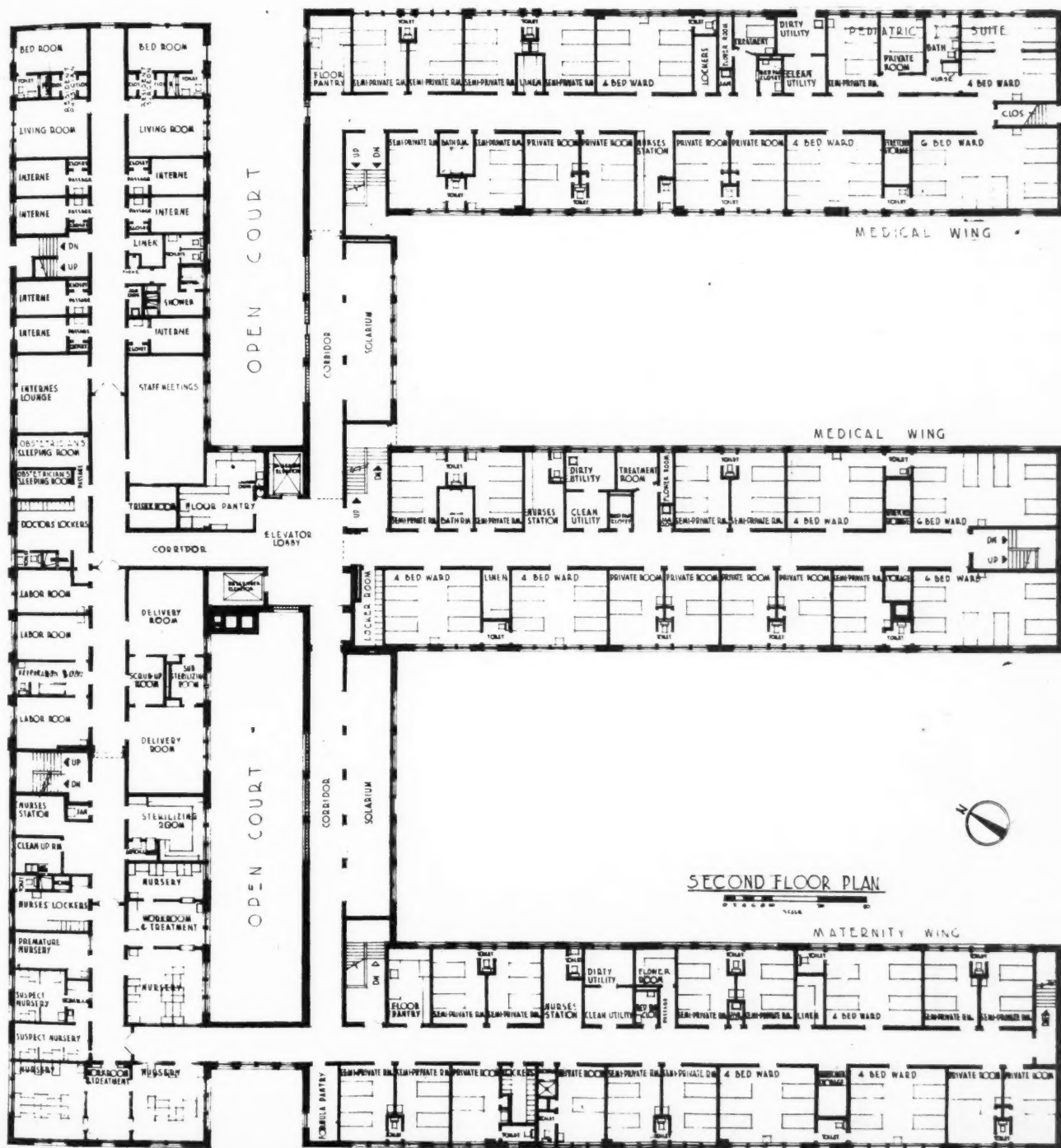
The remainder of the second floor is devoted to the use of medical patients. A special pediatrics suite is provided, consisting of a separate group of rooms set aside for the care of children, complete in itself, with its own nurse and special bathing facilities.

Each nursing wing throughout the hospital is equipped with a treatment room for the use of doctors in making examinations and changing dressings. A flower room, with space for vase storage and sink, a bedpan steri-

lizing closet, a linen room and a stretcher and wheel-chair alcove are also provided.

Living quarters for the seven resident interns and resident physician and surgeon are also located on the second floor. Lounge and living rooms are included in these quarters.

The third floor is entirely devoted to the surgeries and surgical patients, together with their related departments: cystoscopy, fracture, fluoroscopy and x-ray. Considerable time and research were devoted to choosing the lighting for the surgeries. The operating lights are all recessed into and flush with the finished ceil-

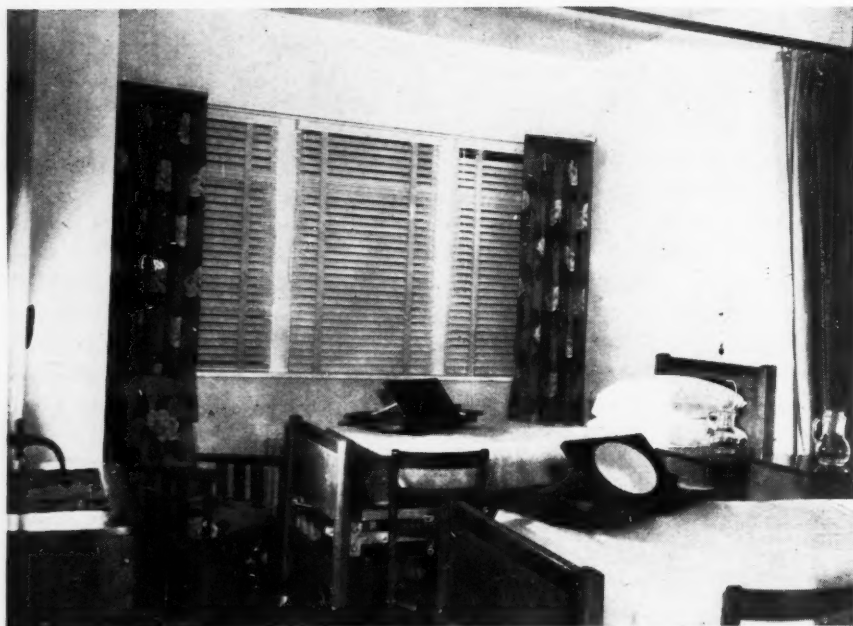
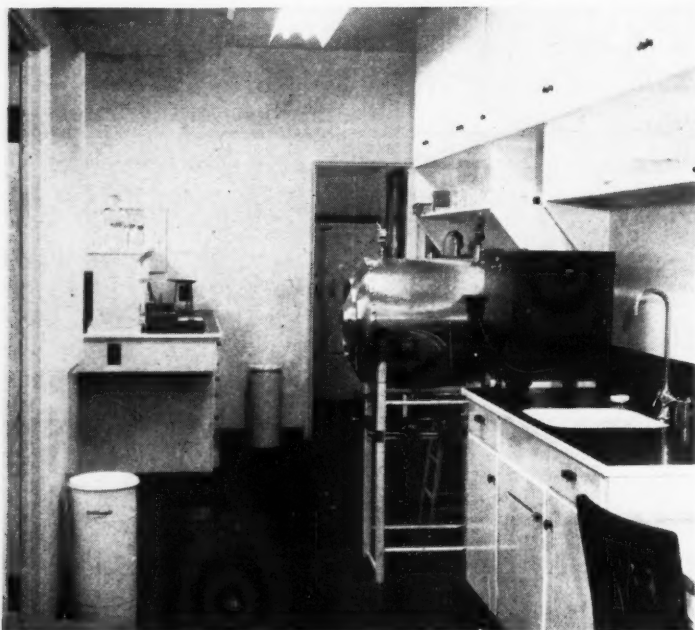


SECOND FLOOR PLAN

ing and consist of 26 fluorescent tubes and six incandescent floodlights, giving as close an approximation of daylight, with the elimination of shadow, as possible. This feature is further designed to reduce the heat given off by operating lights, with the subsequent discomfort to the staff.

From the third floor convalescent patients can be taken to a sundeck on the roof of the maternity wing. This is partially roofed over and affords a sweeping panorama of the city, Sound and mountains.

All corridors, basement and service room ceilings and stairways are of reinforced concrete. Exterior walls are of select common brick. The main entrance is of terra cotta with



Above: One of the two large solariums which are located off the elevator corridors on the second and third floors. The exterior walls are built of glass brick and natural red brick. Center: A section of the main laboratory showing doors to the blood bank, center, and tissue room, left. Below: A typical semiprivate room. Every effort has been made to make the rooms homelike and comfortable.

the cast stone sculptured panels above the doorways. Floors are of asphalt tile throughout except in the service wing, which has quarry tile; the operating rooms, which are provided with ground terrazzo, and bath rooms and clean-up rooms, which have ceramic tile floors.

Hard wall, smooth finish plaster is provided throughout, with certain rooms, such as the labor and delivery rooms, completely isolated with 4 inches of acoustical insulation. All corridors and certain specified rooms have 1 inch fireproof acoustical tile on the ceiling. Surgeries, scrub-up rooms, sterilizing rooms and baths have glazed ceramic tile walls.

The total cost of the project, excluding land, was \$650,000; this figure includes \$130,000 for heating and plumbing; \$190,000 for other fixed equipment, and \$70,000 for expendable equipment. There are 93,000 square feet of floor space, giving a cost of approximately \$7 per square foot, and 200 beds, giving a cost of \$3250 per bed. The cost of the land was \$55,000.

# An Employer Eyes the Blue Cross *and finds it good*

*but offers some suggestions  
for making it still better*

**WILLIAM D. REIMERT**

Executive Editor  
Call-Chronicle Newspapers  
Allentown, Pa.

I HOPE it will be understood at the outset that I am not an authority on hospitalization plans. Of their internal workings I know little or nothing, nor am I familiar with their financial setups, their experience statistics. I speak entirely as a user of the plan, personally and from the point of view of the employer.

I do not think it an exaggeration to say that hospitalization insurance as represented by the Blue Cross is ahead of the times. In other words, there still remain many skeptics as to its necessity and practicability, particularly as the plan applies to employer participation.

Many employers still believe their responsibility to their employees ends when they have paid them for services rendered. The employees' personal problems, these employers will contend, are their own. Theirs is the job of budgeting their affairs so that they can take care of sickness, accident, emergency operations and the other exigencies of health every family must face sooner or later.

## Payment Is Not Enough

Those who face personnel and the problems of employee morale squarely, however, have long realized that it is not sufficient to provide pleasant surroundings for work, clean restrooms and pleasant lunch rooms. They know from experience that the employee who comes to work in the morning bowed down by worries back home cannot be a contented employee and certainly is not an efficient one.

Just plain common sense should be sufficient to indicate that mere working conditions are not in themselves the cure for our social ills. Why does a man work anyhow? To support himself and his family. Its welfare is his constant concern and, if it is jeopardized by lack of funds or by his inability to provide proper medical attention, his concern is bound to be reflected during his

working hours. His production falls off. He becomes unhappy.

It is doubtful if compensation even higher than the high standards set by American industry would be sufficient to meet the needs in this particular instance. Other factors play a tremendously important part in the distribution of the average family income which make the need for insurance all the more imperative.

For one thing there is the keen competition for every dollar the wage-earner brings home each week in his pay envelope. Nowhere in the world is this competition so keen. Every hour of the day the radio urges its listening millions to buy this and to buy that. Each passing day finds science and invention producing something new for the comfort and convenience of the American public and the best brains of American industry try by every conceivable means to convince the public that these products are a necessity.

And who is there who would dare say in this day and age that any of the articles offered represents an extravagance? The selling job has been a good one. The average American believes without fear of contradiction that these things are his right. The advertising copy writers and sales managers of American industry have convinced him that this is so.

He is exposed wherever he turns to this terrific competition for his dollar and strong indeed is the family that can resist it.

Second, it is undeniable that the average man cannot, even if he were

to set aside a definite amount of money each pay day for such purposes, anticipate the extent of the emergencies that may be visited upon him. The most thrifty and the most careful are constantly being thrown completely off financial balance by the unexpected accident, the sudden and violent illness of himself, his wife and his children, with the result that he either has to go into debt, has to dig inordinately into his savings or fails to obtain the proper kind of medical attention. In any event the experience is bound to have its effect on him as a human being and as a producer.

## There's Always Human Nature

Third in this list is what is commonly referred to as human nature, and we don't pay enough attention to human nature. Take any group of employees and you are bound to find some, no matter how well intentioned they are, who simply are incapable of managing their affairs efficiently. For them even minor emergencies can readily turn into tragedies that can change their whole outlook.

Finally, we might as well face the fact that this country has been experiencing a social revolution of mighty proportions. For the last twelve years the people of America have been sold on the idea of security as a fundamental right. In millions of minds, this right has become as fundamental as the right of franchise or the right of free speech.

The American working man today

Presented at a meeting of Blue Cross plan executives at Bethlehem, Pa., 1944.



believes not only in the opportunity offered by the American system. He has been taught to believe that he has a right to a job, to certain conditions of work as related to hours, to a minimum scale of wages and to protection against the so-called rainy days his forefathers used to protect themselves against. He now believes in these things implicitly and, what is more, he has developed the ways and means through unions, through politics and through pressures of one kind or another to get them.

### New Deal Saw the Trend

This development cannot be attributed in its entirety to the New Deal. Rather, it should be said that the New Deal rode into its present position by taking full advantage, by seizing leadership in this trend, and the trend will not pass with any change in political parties. The American working man has felt his own social strength. He has had a taste of social security, and unless I miss my guess he is going to have more of it.

All of which, of course, ties in closely with this thing we call private enterprise. Basically, I think the working man is for private enterprise and he will continue to be for it so long as private enterprise provides those things he now believes his fundamental right. If the day comes when another system will provide him more, he will probably change. And this is no idle warning. It is written and underscored time and time again in the experience of recent years. Either private enterprise will take the initiative in a broadened social outlook or a new system will replace private enterprise.

Of course, the matter of health insurance is but one of the elements in this whole social problem. I speak from considerable personal experience when I say that recognition of the problem of health makes for happier relationship between employer and employee, increases efficiency and solves many a difficult personnel problem.

The Allentown *Call-Chronicle* is a compact organization and, I believe, fairly typical. In normal times we employ between 300 and 350 full-time employees, including clerical help, salesmen, reporters and skilled mechanics.

Their average pay is well above

that of the general run of industry in the Lehigh Valley. Many of our people own their own homes. Most of them are of solid, substantial, thrifty, conservative Pennsylvania German extraction.

Frankly, we have been under no particular pressure to institute any sort of health program, although some of our unions have discussed the matter from time to time, but a great many of our personnel problems could be traced directly to the incidence of sickness.

The management of the *Call-Chronicle* has always been sympathetic in the matter of employee problems. But, as so often is the case, the trouble had already started before anyone could get to the root of it. Frequently, distraction, carelessness, absenteeism and even heavy drinking could be tracked straight back to a heavy hospital or doctor bill or to worry about the imminence of incurring such an obligation. Actually, most of them were nothing that an advance of \$100 or so could not correct, but often it was a long time before the cause of the trouble could be found and the cure effected.

### Bought Life Insurance

Some years ago as a partial effort toward solution, we instituted a program whereby each full-time employee was provided at company expense with a minimum of \$1000 life insurance. With this went the privilege of buying through the payroll deduction plan health insurance in amounts governed by the earnings of the individual employee. As time went on and employees recognized the value of such insurance, more and more of them applied for it.

However, this was not the complete answer. Health insurance covered only the wage earner. It did not protect the members of his family. Children would get appendicitis and fall out of cherry trees and have to have their tonsils removed, and wives would have babies and every now and then the old man would have to go to the hospital for hernia or a gall bladder condition.

So we added the Blue Cross hospitalization plan of the Lehigh Valley as a further supplement. But even here we ran into good old human nature. Even though it was available through pay-roll deduction, many employees just failed to take

advantage of the opportunity to secure themselves against hospital bills. They took a chance and chance caught up with them.

As of Jan. 1, 1944, we took the last of a series of steps and assumed full cost of all three types of insurance. Today, every full-time employee of the *Call-Chronicle* newspaper enjoys at company expense: (1) a \$1000 life insurance policy, payable to a beneficiary of his own choice; (2) insurance approximating half his salary for a period of thirteen weeks for sickness or accident, in addition to the customary compensation insurance required by law, and (3) hospitalization insurance covering not only the employee personally but every member of his family if he has one.

As of today 265 employees and 353 dependents, or a total of 618 persons, are enjoying the benefits and security of hospitalization insurance. In the four and one half years the plan has been in operation, there have been 65 hospital cases, totaling 615 days of hospital care. Almost \$5000 in hospital bills has been paid. The average stay has been 9.4 days and the average bill, \$73.85.

I am not in a position to furnish statistics on the first six months of operation under the new plan but, since it now covers approximately twice as many persons, it is safe to assume that the benefits have accrued accordingly. Certainly, we have had every reason to be delighted with the results.

### It's Not the Final Answer

Frankly, as users and as payers of a substantial sum of good hard cash to the hospitalization plan, we do not believe it is the final answer to everything we have been looking for. There are still some "bugs" to be worked out, and it is to be hoped that, as time goes on, as Blue Cross plans grow, as their income increases, the situation will automatically take care of itself.

As patrons and participants in the Hospital Service Plan of the Lehigh Valley, we are interested to note that there are 81 such plans in operation in the United States and Canada, with an enrollment of 16,000,000 persons, 54 per cent dependents and 46 per cent subscribers. We likewise note with interest that the Hospital Service Plan of the Lehigh Valley, the oldest in Pennsylvania and one of

the oldest in the country, has an enrollment of 72,000 in 1500 co-operating groups and pays more than \$26,000 monthly for hospital services rendered to its members. As a matter of fact, one person out of every five in the valley area is already a subscriber.

These figures suggest that hospitalization, for all its fine record of expansion in the past, has a bright future and that present participating groups stand to benefit as the plan expands, as is the case in all such mutual enterprises.

It will not be as easy as all that, however. Already Blue Cross is developing the stiffest sort of competition from old line commercial insurance companies. To be honest about it, these far larger and older institutions with their tremendous organizations and background of experience have much that is attractive to offer the participating employer whether he bears the entire expense himself or makes health insurance available through the pay-roll deduction plan.

In our own instance, it would be far simpler in many respects to combine our entire insurance program in a single operation with a single company and were it not for the fact that we were anxious to go along with a local institution, we would have considered more than seriously the idea of buying our health, sickness and hospitalization insurance in a lump.

#### Commercial Firms Compete

Commercial companies are increasingly aware of this attractive market and, you may be sure, are offering many inducements, ranging from handsome rebates based on the employer's experience to added services, such as surgical coverage.

One of the big selling points of Blue Cross so far as we were concerned was the fact that we could insure not only our employees but their families as well. This could not be done on a comparable basis with the companies with which we already were doing business.

In the matter of servicing, our experience with Blue Cross has been that it still has far to go to catch up with its competition. While it is true that hospitalization cases receive prompter attention by reason of the fact that most of them are in local hospitals and can be immediately

cleared, it is also true that regular insurance companies do provide a superior service in the way of literature and health guidance.

The employer who pays the full load or the one who carries part of it, being human, likes to feel he is getting his money's worth. He won't develop this feeling entirely from the reaction of his employees. They will not come every three months to thank him for hospitalization, for in time they take their coverage so much for granted that it becomes an unnoticed part of their lives.

We have suggested from time to time that the Hospital Plan of the Lehigh Valley prepare attractive folders for insertion in pay envelopes which will serve as periodic reminders of the advantages of the services and the fact that such services are being provided by their employers.

#### Give Employee Receipted Bill

Some concerns of our acquaintance make it a practice to provide each employe with a receipted bill for the insurance he has received. Such a practice has a highly beneficial effect and should be encouraged by the operators of the Blue Cross in its own interest as well as in the interest of its clients.

The man in charge of handling the details of the plan in our own office informs me that the greatest misunderstanding arises out of the application of the service for diagnostic purposes; in conversation with other users he has developed the opinion that there could be decided improvement in this connection, both in the matter of interpreting the extent of the service and, possibly, in expanding it. The matter of x-ray examinations, it has been repeatedly suggested, should be given careful attention.

Participating hospital administrators with whom I have discussed the matter are almost unanimously of the opinion that the Blue Cross has had a decidedly beneficial effect from the standpoints of receipts and improvement in the general health. At one large Lehigh County hospital the average hospital stay has been reduced to 11.4 days, considerably less than the previous average, and an official attributes this to the fact that hundreds of persons under hospitalization plans have taken care of their illnesses sooner than they might have done under uninsured

circumstances, with the result that they are more easily and quickly cured.

However, hospital men, like subscribers, are not entirely satisfied. Most of them, I am sure, would like to see the day come when all extra items, such as oxygen, ambulance care and special medication, will be taken care of by the plan and not be charged as extras. This, undoubtedly, will require a unification of rates by member hospitals, some of which now have several scales of special charges depending on whether the patient is occupying a private or semiprivate room or is a patient in the ward.

By and large, it would be my opinion that most subscribers to Blue Cross in the Lehigh Valley are happy in their connection. Their criticisms are comparatively few and none of them is violent. They ask principally that their hospitalization plan be on its toes, first, to broaden its benefits wherever possible and, second, to improve its service, be they direct or educational, as expansion and facilities will permit.

Most employers have learned from pleasant experience that insuring the human body is a common sense thing to do, a sound investment in employe relations and thoroughly in keeping with the times in which we live.

#### Leaders Deserve Praise

And for the pioneers in the Blue Cross movement who are on the firing line, we have the warmest praise. Theirs has been the vision and the courage to start a great humanitarian movement, a movement that has had a great appeal because it is sound, a movement that not only has resulted in reducing the financial trials and tribulations of illness but has had a marked effect on the general health of a large segment of the public because the subscribers have no reason to delay treatment.

The Blue Cross has done a job in the American way—by taking a serious human problem and solving it by sound business methods. It has given millions a sense of self-sufficiency and self-respect. The Blue Cross, I cannot help but feel, continues to make progress and in this progress I bespeak the support and encouragement of its subscribers and the participating hospitals.



## SMALL HOSPITAL FORUM

# The Old Folks at Home?

**B**EDS on porches, beds in corridors, beds in basements. Two beds in single rooms, three beds in two bed wards, four beds in three bed wards. That's how occupancy bulges in most of the community hospitals in America in this year of worldwide war.

The other day we all but stumbled headlong into a man's bed in a hospital reception room. Those who want to visit this man—we didn't—have merely to step in the front entrance, peer around a screen belled by the breeze and there they are, sharing their friend's dubious and drafty privacy. No interval to summon the bedside smile, no moment to rehearse the tactful greeting—Eureka, they have arrived!

### Why Occupancy Is So High

The three readiest explanations given for the fact that hospitals are often more than 100 per cent occupied are: (1) the mounting momentum of human reproduction; (2) spreading Blue Cross coverage, and (3) high employment and wage levels.

A fourth factor must be taken into our accounting if the hospitals of southeastern Iowa are typical of those in the country at large. These rural community or small town hospitals are half full of old people. Chronic disease patients occupy relatively many rooms; elderly patients fret away the long months in fracture beds; some became home problems because they grew incontinent; some are sliding downhill mentally as well physically; some are no longer ill at all but nobody at home cares enough to care for them personally so they stay on month in and month out as hotel guests, with the county or the family footing the bill.

In these localities there are no chronic disease hospitals. The crowded old peoples' homes are ill equipped to care for persons needing

No—they are creating a housing problem in the hospitals in which their families have “parked” them, apparently for the duration

MILDRED WHITCOMB

practical nursing care and occasional medical supervision; the few nursing homes are not reasonably priced or publicly subsidized; beds for convalescents have not even been considered in community health planning.

Hospital superintendents interviewed are near to frenzy over the situation because with so many beds filled with superannuates inadequate accommodations remain for the acutely ill. Waiting lists for beds for essential surgery are lengthening alarmingly; maternity cases sometimes have to be accommodated in makeshift quarters, not a sound or even safe procedure, and emergency cases can be accepted only by overcrowding to the point at which the already depleted nursing staff is further impeded in the day's progress.

One superintendent of a 53 bed hospital has given up her office and now must transact all business in a Lilliputian area that serves simultaneously as information desk, admitting department, accounting office, switchboard quarters and medical records depository. The corridors of this outdated structure are too narrow to accommodate beds and, that undesirable but possible space-stretcher eliminated, new patients must actually be refused admittance until the acutely ill have progressed to the earliest hour at which they can be discharged with professional im-

punity. The old folk stay on, sweetly or whimperingly, month after tedious month.

As much of her time as this superintendent can spare from her juggling of the jobs of administrator, superintendent of nurses, dietitian, housekeeper, pharmacist, purchasing agent and records librarian, she works on the families and physicians in an effort to dislodge some of these elderly patients from the rooms and beds they occupy. Her persuasiveness has only limited success.

### Doctors “on the Spot”

The doctors naturally view the situation from the standpoint of their patients. They are cognizant of the home difficulties among the poor; they dislike to offend local personages and close friends among the well-to-do by suggesting that they look after parents and relatives in their own temporarily understaffed homes. It is only when an irate physician cannot get a bed for an emergency case that he is willing to listen to reason on these chronic disease patients and then some other doctor's cases constitute his chief complaint. At least, this is the tale as told by more than one distracted superintendent.

A family promises to remove Grandpa as soon as it can find a maid or a practical nurse or a willing relative to care for him.

## VOLUNTEER ACTIVITIES

"If you'll just find me a maid, I'll take him home tomorrow," a young matron asserts, but if the hospital administrator knew where or how to lasso a maid she would not be forced to scrub a floor herself now and then.

None of the hospitals visited has found an immediate solution. An occasional cure for the condition is when Mrs. A's husband lies critically ill in a bed in the corridor while her close friend Mrs. B's great aunt occupies the de luxe corner on the same floor. Mrs. B's flowers and sympathy seem scarcely to propitiate Mrs. A, so reluctantly Mrs. B drives Aunt Dorcas home, even though the maid will probably serve notice when she sees them sweeping up the drive past the last blue spruce.

"In a few hours at the telephone I could refill every bed in the house by tomorrow morning," Mrs. Cora Murray, superintendent of Jefferson County Hospital, Fairfield, Iowa, declared one afternoon in mid-November. "If I could get the old people worked out, the really sick could come in."

This sad refrain echoes down the halls of hospitals in Ottumwa and Oskaloosa. Grinnell, too, while not overcrowded at this period, has a house that is nearly half-alive with chronics.

### They Dream of Postwar Plans

Most of these small hospitals have postwar construction projects. Ottumwa has the plans all drawn for a new 125 bed institution; Jefferson County Hospital will build a new wing that will double its present capacity of 30 beds. Mahaska Hospital at Oskaloosa is to refinish its vacant third floor where it will house an up-to-date maternity department, thus freeing many beds for other patients.

Yet none of the administrators of these Iowa hospitals thinks that the proposed new beds or the fact that the postwar period will see more women back in the home and less money for "parking out Pa" will more than partially solve the problem of the care of the aged.

More people are living to old age every year. Some special provision will have to be made in their own localities for their care in sickness and perhaps even in health. Geriatrics has arrived—as a housing problem as well as a medical specialty.

### They Serve as Sitters

You have heard of the many different services that volunteers are performing in hospitals today. Here is a new one for which we have to thank no less an authority than Barbara Bryant, director of volunteers, University of Chicago Clinics.

Good cooks are worth their weight in gold these days, as everyone knows—well, they are worth extra consideration anyway—and Miss Bryant and her volunteers are providing just that. Briefly, they serve as sitters for the cook's nine months old baby. There simply was no other alternative. The cook had a baby; she also had a job which she wanted to keep. For its part the hospital had a cook which it wanted to keep. Hence, each day, Sundays excepted, from 7 a.m. until 4 p.m., or thereabouts, the girls attend the cook's baby in the hospital, faithfully, conscientiously, if not exuberantly. It is working out splendidly from all accounts. No complaints from anyone, including the baby.

### Working for Beds

Our volunteer of the month is Helen Taylor, a World War I registered nurse. She contributes two days a week—or more on demand—to Community Hospital, Grinnell, Iowa. The check for her professional services is turned over to the hospital to buy new beds. She is now contributing her third bed.

### They're Buying Silence

This 58 bed hospital at Grinnell has an auxiliary of 258 members. The 1944 rummage sale netted \$128; tag day, \$350. With these and other proceeds, the auxiliary buys all the supplies, linens, magazines and considerable furni-

ture. It conducts fruit showers and fresh vegetable showers for the hospital.

The hospital's main improvement of the year is the application of acoustical treatment to strategic areas—the nursery, delivery room, corridors, diet kitchens, service rooms and elevator landings. Without financial aid from an active auxiliary this major improvement could not be made.

### Another Kind of Federal Aid

Georgetown University Hospital, Washington, D. C., is one of those institutions that couldn't operate in war time without volunteer aid. Last summer it developed the Government Girl and the Government Men hospital volunteers. Within three months 834 girls and 132 men were on the list of workers. Howard J. Belser is director of volunteers for the institution.

### Juniors Give Good Service

Detroit is the first middle western city to train Junior Red Cross hospital service orderlies. This group of boys from the eleventh and twelfth grades of Belleville High School, 16 in number, works at Wayne General Hospital. They wear white hospital coats with Junior Red Cross arm bands.

The first Detroit hospital to train and use Junior Red Cross girl volunteers was Alexander Blain. Now 2500 of these 17 year old girls are at work in 20 authorized hospitals in Detroit and Wayne County. They have served 15,000 hours.

Volunteers in this group must pass a physical test, must promise to keep up their scholastic standing in school and must have their parents', guardians' or nearest relative's permission to enter this service. They take a ten weeks' course given by a registered nurse.

A junior hospital service member serves in the pediatric department at Alexander Blain Hospital in Detroit.





# PURCHASING

## Is a Matter of Record

ISABELLA N. WILLIAMS

Purchasing Agent, Michael Reese Hospital, Chicago

**W**HAT records should the hospital purchasing office have easily accessible at all times? This is a much bruited question!

My own conclusions on the subject after many discussions with other qualified persons and after many years of experience in hospital purchasing are that the following records are essential:

1. The original requisition presented by the requisitioning department.
2. Carbon copy of the order sent to the vendor.
3. Card index showing the name of the article, the vendor, the price, the order number, unit of purchase, quotations, discounts and last, but foremost in importance, as complete specifications as can be incorporated on a small card. (Cards 5 by 8 inches seem the best size to use.)
4. Complete catalog file.

### Keep the Files Active

The first three files should never be relegated to the record storage vault, regardless of their age. A continuous and contiguous file should be maintained from year to year. Once sent to the usual hospital storage vault, records are as lost as if they had never existed. I have known of only one hospital where old records were filed in any semblance of order and where one could find needed information of past years without burrowing like an archaeologist.

A good rule is to keep records where the purchasing agent—and his successors—can get at them when they are wanted. One never knows when it will be necessary to obtain all possible information on some article bought years before; all equipment wears out, breaks or becomes obsolete at unexpected times and the purchasing agent who can put his hands on an earlier record without difficulty may save himself hours of

extra work and many headaches.

**Requisition and Order:** These forms need no special clarification, except that as one cannot always get complete specifications on the card index it may be necessary to refer to the original requisition, whereon complete specifications should always be given. Also in order that the purchaser may be sure that the delivered goods are exactly what are wanted, complete specifications should always appear on the written order to the vendor.

*Do not leave the details of your purchase to the imagination or judgment of the vendor.* Should he be lax or willfully dishonest and should the goods fail to come up to expectations, the buyer then has no redress. Complete specifications are the only safeguard.

Requisitions from the departments should be filed in numerical order under department headings. Orders should be filed under the name of the vendor in an alphabetical file but the folder contents should be in chronological order.

**Card Index:** The most varied opinions and uncertainty seem to surround the card index. The questions arise: On just what items shall a card record be kept? Shall notations be made each time an article is purchased? Just how far shall one go? How much time and money shall be spent to keep this file? Is it worth the time and money?

My feeling is that one should keep a record on *all* items purchased. It is admitted that this requires some effort and in a hospital of even 100 to 200 beds will take the greater part of one person's time. And every record must be kept up to date or it will be valueless. But I have found that the time and effort involved have paid dividends in saving labor and nervous strain.

To keep such a record may seem wasteful when one considers the

large and varied number of articles and sizes used in hospitals, in everything from nuts and nails to surgical instruments. Too often, though, department heads leave the ordering of small items to other members of their departments, who not only omit specifications when requisitioning but do not know how to write specifications and the card index will be as valuable to them as it is to the purchasing department.

I do not feel that it is necessary to make an entry each time a purchase is made if there is no price change although the entries will be useful if a perpetual inventory is not kept. But a record should be made of each price change, whether an order is placed or only a quotation is given. If the quotation only is entered and no order is given to any vendor at the time, it is well to make a notation later of the first order placed after receipt of this quotation.

**Catalog File:** I had the good fortune to fall heir to what I consider the best catalog file that I have ever seen. All catalogs are listed on a cross-index file, one set of cards indicating the dealer's and manufacturer's names and the other set indicating the items. Each catalog is given a number which is listed on both sets of cards and under which the catalog is filed. Stiff-back catalogs are filed in a sectional bookcase and paper-backs, in a regular letter file. One valuable source of reference in this file is *The Hospital Yearbook*, which has the advantage of incorporating many catalogs in one easily accessible unit.

The other departments should be educated to use this file but a catalog should never be permitted to leave the purchasing department without a record of when and by whom it is taken. Good catalogs are hard to replace, particularly in war times, and a good one becomes the purchasing department's bible.

In addition to the four files mentioned, a quotation file should also be kept, but not necessarily longer than two years. Quotations should be filed under the vendor's name in alphabetical order and on each quotation sheet names should be given of all other dealers asked to estimate at the same time. It is also handy to note on the accepted quotation the number and date of order.

ONE major and worldwide problem in public health results from an erroneous translation of the Old Testament. This problem concerns the disease that is now called leprosy.

The affliction to which we at present apply this term is certainly the least communicable of all communicable diseases. It could be treated in any general hospital with vastly more safety than can tuberculosis, except for the panic that arises from the biblical associations of the name.

Numerous large hospitals and clinics refuse to employ the word leprosy at all. Instead they use the term Hansen's disease from the discoverer of the causative organism. The reason for this policy is the fear that patients, nurses and even physicians would desert the institution simply on account of the horror historically associated with the name.

#### They Are Still Persecuted

At the present time a person who is branded as a leper suffers more from the word than from the disease. He is shunned as one who is unspeakably dangerous and unclean and is actually persecuted in a manner hardly different from that in the Dark Ages.

Until recent years this confusion between the biblical and modern use of the term leprosy was a cause of suffering to thousands of patients but was hardly in itself a public health problem. Recent advances in chemotherapy, however, have profoundly changed the situation. Newly discovered groups of drugs, especially promin and its derivatives, have proved powerfully destructive to all the acid-fast bacilli, which include the tuberculosis bacillus and the closely related *Bacillus leprae* of Hansen.

The original promin acts dramatically in experimental tuberculosis infections in laboratory animals but is too toxic to use in large doses on human beings. Organic chemists, however, are busy with the problem of tacking new side-chains on the original molecule and are creating less toxic and more effective derivatives faster than physicians can evaluate them clinically.

Even habitually skeptical investigators have come to expect that the promin group of drugs will soon occupy a place in the treatment of leprosy and tuberculosis similar to

that which the sulfonamide group and penicillin occupy in the treatment of epidemic meningitis, pneumococcus pneumonia and gas gangrene.

The public health problem at present is less that of discovering new drugs for the treatment of leprosy than that of persuading patients stigmatized as lepers to submit to treatment. At present there are, even in the United States, at least two patients at large and untreated for every patient who is receiving medical care for Hansen's disease. The reason for this is solely the fear of the name. Patients prefer to conceal their condition and go into hiding rather than to be ostracized by society as they will be when the name of leprosy is fastened upon them.

Even a superficial reading of the thirteenth chapter of Leviticus is sufficient to convince any physician that the six or seven conditions which are defined under the Hebrew word *zaraath* had nothing in common with what is called leprosy today. The repeated expression throughout the Old Testament, leprous as snow, may be applied to vitiligo or to psoriasis but could never by any acrobatics of the imagination be applied to infection with Hansen's bacillus.

The condition of the scalp described in Leviticus is quite unmistakably favus, or ringworm of the scalp, and not possibly leprosy. The other passages in this interesting chapter are more difficult to identify but apparently apply to vitiligo, psoriasis and to leukemia and tuberculosis of the skin.

The most characteristic features of infection with Hansen's bacillus (such as nerve involvement with loss of sensation in the extremities) are nowhere mentioned. The descriptions of leprosy of garments and leprosy of houses should be conclusive proof that *zaraath* is not the name of a disease and certainly not of the disease that we call leprosy.

The clue to the significance of this condition among the ancient Hebrews is to be found in the numerous cases in which leprosy is described

# That Tragic Name of "Leprosy"

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as being an affliction which is the result of divine displeasure (as in the case of Miriam) or as being a sign of divine power (as in the case of Moses) or of being miraculously cured by bathing in the Jordan (as in the case of Naaman).

#### Indicated Blemish Not Disease

The word leprosy quite obviously was applied not to a disease of the skin but to a mark or blemish which rendered the person ritually unclean.

Blemishes or marks were regarded by all primitive tribes as having magical significance, as can be easily verified in Frazer's "Golden Bough." Among the ancient Hebrews in particular, blemishes or marks were regarded as of evil omen. An animal, for example, that was selected for sacrifice had to be "without blemish"; likewise a man, even of the tribe of Levi, had to be "without blemish" in order to be acceptable for the priesthood.

The Greek word *lepra* had been used in the writings attributed to Hippocrates to refer to a vague group of scaly conditions of the skin regarded as having no serious importance. The translators of the Hebrew Testament into Alexandrian Greek (the Septuagint) at about 100 B.C. used the word *lepra* in their effort to find a Greek equivalent for *zaraath*. The writers of the New Testament followed the example of this Greek Septuagint.

One important feature of leprosy as described in the New Testament confirms the view that it was thought of essentially as a mark of taboo. Other diseases in the New Testament are described as being "healed" or



When Jerome came to translate the Bible into the Latin Vulgate a new situation confronted him. Galen already had precisely described the condition which we now know as leprosy. Galen's description is the first that can be identified beyond all question as Hansen's disease. The term which Galen applied to it was Elephantiasis graecorum.

During medieval times persons who were pronounced by priests to be lepers were persecuted with great vigor. The last rites of the dead were said over them; they were excluded from inhabited places; they lost such legal rights as that of inheriting property or of making wills, and they were largely confined within the many hundreds of leper houses which existed throughout western Europe.

We have, furthermore, no means of knowing why the condition which was called leprosy suddenly disappeared from western Europe simultaneously with the great epidemic of syphilis at the end of the fifteenth century. It seems plausible, however, in view of the diagnostic difficulties which skin diseases present even in our own time, that physicians who had been calling everything leprosy suddenly began to call everything syphilis, a condition which the patient found much less embarrassing! It was not until 1871, when Hansen's bacillus was discovered, that what we

It is estimated that there are at present at least 5,000,000 people in the world infected with Hansen's bacillus. Most of them inhabit the tropical zones, though there are scattered foci in the Baltic countries, Norway and Iceland and a somewhat larger number of cases in Japan and the northern coastal regions of China. Probably 5000 victims live in the United States.

The infectiousness of the disease in this country is extremely low, practically all the cases being imported from the far northeast of Europe or from the tropics or the Orient. In the United States, the Hawaiian Islands and the Philippines it has been observed that the chance of contracting the disease is extremely small even when an uninfected husband, or wife, goes to live with his mate in a leper colony. Throughout the last fifty years not one member of the medical or nursing staff of the National Leprosarium, Carville, La., has been infected with the disease.

At present a formidable movement is under way to escape from the completely unjustified revulsion which the name leprosy excites. This movement is prompted both by considerations of justice to the patient and by the public health need of making the highly promising new weapons of treatment available to every person who is infected.

The purpose can easily be attained by making official the already widely used term Hansen's disease in place of a name which has disastrous and altogether erroneous biblical associations. Some purists have objected that it is undesirable to have diseases named after the men who first described them or discovered their cause. Words, however, are labels. The avoidance of tragic misunderstandings is far more important than the adherence to artificial standards of linguistic purism.

The official adoption of the term Hansen's disease, which seems not far off, will spare thousands of patients from needless suffering. It will encourage many more thousands to enter sanitariums and take advantage of the rapidly increasing probability of cure. It will also relieve hospitals and hospital administrators of one of the most difficult and embarrassing problems that can ever confront them.

**E. M. BLUESTONE, M.D.**

- The fee-splitter (not limited, by any means, to the medical profession).

- An ugly cosmetic result following necropsy.

- Vol. 64.

## Administrators

**Dr. A. P. Merrill**, medical director of St. Luke's Hospital, Chicago, has been appointed superintendent of the Home for Incurables, New York City, succeeding the late **Dr. Moody**



**W. Arnold**. Doctor Merrill was assistant superintendent of San Francisco County Hospital from 1938 to 1940 and came to Chicago to serve as assistant director of St. Luke's Hospital, the position he held until 1942, when he was appointed medical director.

He has been a candidate for a master's degree in hospital administration at Northwestern University and was recently elected the first president of the special students engaged in this course. He is a member of the American College of Hospital Administrators, a fellow of the American Medical Association and a member of the American Hospital Association.

**Otis N. Auer**, superintendent of Monmouth Memorial Hospital, Long Branch, N. J., for thirteen years, has resigned his post. Mr. Auer is leaving the hospital field to enter industry.

**Irene E. Oliver** has been appointed superintendent of Tompkins County Memorial Hospital, Ithaca, N. Y. Mrs. Oliver was formerly superintendent of Weymouth Hospital at South Weymouth, Mass.

**E. D. Witham**, formerly business manager of Jewish Hospital, Cincinnati, Ohio, has been named superintendent of Jewish Hospital at Louisville, Ky.

**Karl H. York**, formerly assistant administrator of Columbia Hospital, Milwaukee, has assumed the position of administrator of Arlington Hospital, Arlington, Va. **C. Tiffany Loftus** has been acting administrator of the hospital since October.

**Chauncey C. Burritt**, former administrator of Christian Welfare Hospital, East St. Louis, Ill., has become administrator of Columbus City Hospital, Columbus, Ga.

**Mrs. Elaine Parkinson Johnson** has accepted the position of administrator at Wyoming General Hospital, Rock Springs, Wyo. Mrs. Johnson was formerly hospital administrator of the Office of Civilian Defense in Hawaii and from 1938 to 1940 was superintendent of Matanuska Valley Hospital, Palmer, Alaska.



**Sister Rosa**, former administrator of Providence Hospital, Washington, D. C., has been appointed administrative assistant at the Central House of the Sisters of Charity of Saint Joseph's, Emmitsburg, Md. Sister Rosa will be responsible for the policies and internal management of the various hospitals conducted by her Order throughout the East. She will be succeeded at Providence by **Sister Marie**, who was for several years superintendent at St. Mary's Hospital, Detroit.

**Sister M. Cornelia** has been appointed superintendent of Andrew Kaul Memorial Hospital, St. Marys, Pa., replacing **Sister M. Dorothy**. In the November issue it was erroneously reported that **Sister M. Turibia** was appointed superintendent.

**Dr. Helen M. Patton** and **J. Walsh Stull** have been named administrative assistants at Wesley Memorial Hospital, Chicago. Doctor Patton served as a resident at the hospital for a year and is now on a fellowship at Northwestern University doing special research work. Mr. Stull, who came to Wesley from the War Relocation Authority, with headquarters at Rivers, Ariz., was formerly business manager at Ryder Memorial Hospital, Humacao, Puerto Rico.

**Col. George B. Cook**, formerly of the Station Hospital at Fort Sheridan, Ill., has been named administrator of El Paso City County Hospital, El Paso, Tex. Colonel Cook is retiring from the Army in which he has served since 1910.

**W. C. Bloxom** has been appointed administrator of Leigh Memorial Hospital, Norfolk, Va.

**Eugene Saxton** is the new administrator of Dodge County Hospital at Fremont, Neb.

**Dr. E. T. Gough** has succeeded **Dr. Karl P. Meister** as superintendent of St. Luke's Methodist Hospital, Cedar Rapids, Iowa.

**Dr. H. Dubner** is the new superintendent of Parkway Sanitarium, Chicago, replacing **Dr. B. J. Sherman**.

**Dr. J. T. Maher**, former superintendent of Madison County Sanatorium, Edwardsville, Ill., has been named superintendent of Vermilion County Tuberculosis Dispensary and Hospital, Danville, Ill., to succeed **Dr. H. P. Maddox**. **Dr. E. K. Steinkopff** will replace Doctor Maher at the Madison County Sanitarium.

**A. M. Lyon**, who has been acting administrator of Central State Hospital, Lakeland, Ky., has been appointed administrator.

**Sister L. Mansfield** has been named administrator of St. Paul's Hospital, Saskatoon, Sask.

**Neva R. Pew, R.N.**, former administrator of Two Rivers Municipal Hospital, Two Rivers, Wis., has been appointed administrator of Findlay Hospital, Findlay, Ohio.

**Dr. Jeremiah Metzger** has succeeded **Dr. Seth Howes** as superintendent of Arizona State Hospital for the Insane at Phoenix.

**J. Clay Holmes** is the new superintendent and owner of New Park Sanitarium and Hospital, Hot Springs, Ark.

**Mrs. George Jones** has become superintendent of Marietta Hospital, Marietta, Ga. She replaces **Mrs. H. P. McConnell**.

**Sister Martha** succeeds **Sister James** as superintendent of St. Joseph's Hospital, Highland, Ill.

**Florence Ebb** has been appointed superintendent of Pattie A. Clay Hospital at Richmond, Ky., to succeed **Ella Shaw**.

**Sister Rose** has assumed the duties of superintendent at St. Anthony's Hospital, Louisville, Ky., the position formerly held by **Sister M. Edigna**.

**M. M. Kohr** has been selected as the superintendent of the new People's Community Hospital at Eloise, Mich.

**Lucy Jennings, R.N.**, has replaced **V. K. Peachey** as superintendent of Community Hospital, Lexington, Neb.

**Freda B. Kerr** has succeeded **Agnes Hatch** as superintendent of Chillicothe Hospital, Chillicothe, Ohio.

**Sister Prima** has been named superintendent of St. Anthony's Hospital, Columbus, Ohio, to replace **Sister Aloysiana**.

**Norman L. Losh** is the new superintendent of Woman's and Children's Hospital, Toledo, Ohio, the position formerly held by **William Losh**.

**Alice T. Thurnan, R.N.**, formerly an instructor in pediatrics at Children's Hospital, Chattanooga, Tenn., is the new director of Hattie B. Munroe Home

(Continued on Page 144)



# TRUSTEE FORUM

CONDUCTED BY RAYMOND P. SLOAN

## TEN QUESTIONS

### That Must Be Answered Soon

EVERETT W. JONES

**B**ECAUSE hospitals will feel the impact of war long after V Day, it is in order now for all of us to think about some of the problems that lie ahead. The first step in solving a problem is to define it. Our present purpose is to project questions that are uppermost in our minds even though the answers may be possible only in the light of new developments.

1. As a by-product of war 15,000,000 young men and women will have acquired an added respect for physical fitness, some knowledge of preventive and curative medicine and a new appreciation of hospitals. These service men and women represent every section of our country and all levels of human economic strata. What is to be their future attitude toward our community hospitals? Probably, their immediate war-connected medical needs will be met through governmental channels but their understanding, approval and support of voluntary hospitals are vitally important because this great army of veterans will exercise a profound influence on the thought and the political action of our country during its generation.

#### How Will Veterans React?

Will these returning veterans become so favorably impressed with the importance of adequate hospital service that they will be in favor of self-respecting, nongovernmental hospital and medical prepayment programs and thus help maintain and improve community hospitals, or will they, because of their war experience, be the more susceptible to persuasion that government could do for the civilian population what it has done for the armed forces in

the way of providing health and medical protection?

Do these questions suggest to the proponents of hospital public relations that an important job lies ahead—also perhaps that it is later than we think?

2. What of the returning doctor? It is timely that we speculate regarding changes that may come in the practice of medicine following this war. The present enrollment of physicians in the services totals approximately 60,000. Let us assume that 50,000 will return to civilian life. Most of those doing clinical work have been practicing group medicine. They have learned about teamwork, whereas many of them, before the war, were individualists in medicine.

In most of the war areas specialists have been available as a matter of routine. Diagnosis and treatment have been carried out on a consultation level. After World War I group medicine was regarded as a desirable objective and, hence, in the early Twenties there was a great development of rural hospitals and clinics, also a demand for staff appointments in cities that were already provided with hospital facilities.

The problem after this war will be much more complicated. The most active one third of the profession is involved. Special training for many has been interrupted. Many thousands have been diverted from their clinical practice into what in civil life we call public health work. The interns have been largely absorbed without the fully rounded training that would have been theirs.

The problem of readjustment is too complex even to enumerate the many points involved. It is not a

new subject but since it concerns the whole hospital field, are hospital people in general giving it adequate consideration? We think not, and if that is so, what are we going to do about it?

3. Maladjustment of medical and hospital service in this country has long been a challenging subject. Now the war is bringing another factor into this already complicated problem of a more equalized service to the people of the various areas.

According to Vance Packard, in an article entitled, "Millions on the Move," the war has brought about the greatest mass migration this country has ever known. Cities have sprung up within a few months where formerly there were cow pastures or farms.

#### Forecast Population Shift

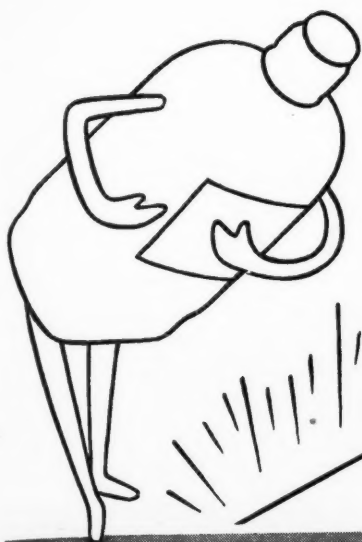
The Congressional Committee for National Defense Migration forecasts that after the war 4,000,000 people each year will move between states in search of new opportunities.

This figure does not take into account the shift of residence of the men in the armed forces. Millions of these have had training in various southern states and a substantial percentage have declared their intention of locating in the South after the war.

Will hospital trustees support state commissions to study the medical, health and hospital needs of every city, town and county in each state? Facilities for the care of aged, mental, tuberculous and chronic disease patients, as well as provisions for public health centers and general acute hospitals, must be thoroughly analyzed. In this connection, how much thought has been or is being given to hospital licensing laws in each state? Every effort must be made to avoid needless and wasteful duplication of facilities and yet to assure that hospitals and public health centers are provided where they are needed.

Plans such as those developed by the Duke Foundation in the Carolinas, the Kellogg Foundation in Michigan and the Bingham Associates in Maine must be thoroughly explored by each state.

4. Will hospital trustees recognize the absolute necessity of appointing well-trained and capable executives as hospital administrators? Will they



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realize that hospital administrators must understand and appreciate not only the all-important aspects of public health, nursing, pharmaceutical, personnel and public relations and other professional phases as they apply to true hospital administration, but also the hotel, maintenance engineering and business management aspects of their jobs?

And when trustees realize the kind of executive they must have, will they recognize that this type of executive must be paid a salary adequate to attract and hold him?

Along with an appreciation of the need for well-trained, able executives, will trustees also support a strong, wide-awake employe-employer relationship policy? Those who deal in human lives must realize the need for the highest type of employe in the community for each grade of job in the hospital.

Adequate and reasonable living wages; clean, attractive rest, locker, wash and recreation rooms, and top-flight, efficient and humane management are essential in a sound personnel program.

5. Will trustees recognize that their function is one of policy-

making? In other words, will they realize that the actual administration and executive direction and *management of all hospital affairs, professional and nonprofessional, should and must be delegated to the administrator?*

6. Will trustees recognize the necessity of close cooperation with their administrator and the medical staff through a medical board or medical advisory committee appointed from the attending staff by the trustees so that the highest of professional standards will be maintained in the hospital?

These standards include: (1) control of surgical and obstetrical practice; (2) adequate medical records; (3) hospital formularies; (4) high quality but, at the same time, economical nursing service and a real educational program for student nurses; (5) a thoroughgoing educational program for interns, residents and other house staff members; (6) proper pathological and other laboratory services; (7) approval of staff doctors by the American College of Surgeons and the various boards of medical specialties, and (8) the necessity of not only meeting the mini-

mum hospital standards of the American College of Surgeons but setting the hospital sights far above these minimum standards.

These are but a few of the matters on which hospital trustees, administrators and staff doctors must concentrate if our hospitals are to fulfill their obligations to the community.

7. Do governing boards of hospitals recognize their obligations of cooperation with other hospitals in their area, with public health departments, organized medicine, organized labor, public officials, business and industry and all other elements in any community to the end that the public health level of all citizens, regardless of race, creed, color or economic status, will be raised?

8. How much longer will hospital trustees countenance the financing of their charity work by an unfair tax on private room patients and underpaid hospital employes? In other words, when will trustees insist on adequate and fair payments, based on true costs, from federal, state and local public officials for the in-patient and out-patient care of categorically and medically indigent patients?

In this connection, it is suggested that trustees and administrators follow the American Hospital Association's Standard Accounting Manual so they will really know what their true costs are.

9. Do trustees and administrators recognize the need for full cooperation with Blue Cross plans so that at least 90,000,000 of our population can benefit from the protection given by prepayment hospital care plans? We can answer the advocates of compulsory federal health insurance by doing the job right ourselves. Along with Blue Cross hospital care plans, we must help organized medicine develop voluntary, nonprofit prepayment medical care plans.

10. Finally, do hospital trustees recognize the fundamental necessity for broadening the representation on hospital boards? Age, wealth and social prestige must no longer be the dominant criteria in selecting members of hospital boards, as has been true too often in the past. Representation must be broadened to include the community leaders in business, industry, labor, education, law, religion and politics. Our hospitals deserve and must have the best brains in America.

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## Question of the Month

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**QUESTION:** There has been considerable discussion within our group whether or not the president of a hospital should maintain an office or occupy a regular desk in the hospital building. Will you kindly tell us what the general practice is?—T.V.

**ANSWER:** Because the president of a hospital serves ordinarily in an advisory capacity and is not expected to devote regular time to the institution, it is not common practice, nor is it deemed desirable, for him to occupy a desk or office space in the hospital. His responsibilities lie in formulating policies rather than in executing them. Consequently, there would appear to be no reason for his prolonged presence at the hospital except when in consultation with the administrator or in the fulfillment of other special duties.

There is even potential danger in such an arrangement because through such close contact the president might be tempted to become involved in matters outside his jurisdiction. The only possible exception is during some spe-

**Each month in this column one question bearing upon hospital trusteeship is presented and answered. The editor is glad to receive questions which any hospital trustee may submit. All identification will be withheld. Replies will be made by mail pending their publication.**

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cial campaign or the enactment of a building program where daily conferences with the administrator, architect or public relations counsel are necessary or advisable.

As part of the new concept of hospital board rooms, it is logical to expect that working facilities will be provided for the hospital president and for the chairmen of various committees. Such rooms then become workrooms rather than showrooms—headquarters for all volunteer activities.

# The Salient Points about



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## REFRIGERATION *for anesthesia and therapy*

LYMAN WEEKS CROSSMAN, M.D.  
FRANK K. SAFFORD JR., M.D.

New York City Hospital, New York

**S**URGICAL refrigeration was introduced by Allen<sup>1</sup> in 1937 and received its first systematic employment at New York City Hospital, New York,<sup>2</sup> beginning in January 1941. It has been rapidly and widely adopted as an anesthesia method that prevents shock in amputations and other severe operations on limbs. The experimental stage is past, since more than 50 publications representing hundreds of case records agree in confirming the efficacy of the method and the resulting marked reduction of mortality in poor-risk cases.

### Impulses Are Not Transmitted

The principle is simple and physiologic. Cold nerves cannot transmit impulses; hence, operations thus performed are painless. Cold tissues cannot respond with chemical or any other reactions to any kind of stimuli; hence, such operations are also without shock. All other anesthesia methods produce anesthesia of nerves only. Refrigeration is unique as the only known means of anesthetizing nerves together with the entire proplasm.

<sup>1</sup>Allen, F. M.: Local Asphyxia and Temperature Changes in Relation to Gangrene and Other Surgical Problems. *Tr. A. Amer. Phys.* 52:189-194, 1937. The Tourniquet and Local Asphyxia. *Am. J. Surg.* 41:192-200, 1938. Resistance of Peripheral Tissues to Asphyxia at Various Temperatures. *Surg. Gynec. & Obst.* 67:746-751, 1938. Surgical Considerations of Temperature in Ligated Limbs. *Am. J. Surg.* 45:459-464, 1939. Reduced Temperatures in Surgery. I. Surgery of Limbs. *Am. J. Surg.* 52:225-237, 1941.

<sup>2</sup>Allen, F. M., and Crossman, L. W.: Suggested Uses of Refrigeration Anesthesia, Including War Surgery. *Arch. Phys. Ther.* 23:711-717, 1942. Tourniquet and Refrigeration in War Injuries. *Bull. Am. Coll. Surg.* 28:53, 1943.

Crossman, L. W., Ruggiero, W. F., Hurley, V., and Allen, F. M.: Reduced Temperatures in Surgery. II. Amputations for Peripheral Vascular Disease. *Arch. Surg.* 44:139-156, 1942.

The operation, therefore, is as if performed upon dead tissue; the technic, duration and extent are entirely immaterial as long as the cold continues, and the only aftereffect is the minimal one that results from the surgically closed wound after the circulation is restored. This is why a patient is able to eat full meals both immediately before and immediately after the operation. This is also the reason why no case is now classed as inoperable, but every patient is given the benefit of any slightest chance of operative help. The greatly reduced mortality statistics have been obtained in the face of these greatly enlarged operative risks.

Although both the principle and its application are simple, the immediate favorable reports from so many diverse sources are somewhat surprising for at least three reasons.

First, there have been deeply rooted fears among surgeons concerning extreme chilling of tissues, the danger of frostbite and other consequences and the harm of prolonged tourniquet constriction, all of which are defied by the radical new procedure.

Second, most operators have begun use of the method after merely reading descriptions, only seldom with the advantage of a practical demonstration, and even this simple technic includes details that must be correct in order to obtain successful results.

Third, the important preliminary steps usually devolve largely or entirely upon young members of the hospital staff, whose inexperience

might be hazardous if the method itself were not so fundamentally safe.

For the average institution and its personnel, the routine steps may be traced in sequence as follows.

Preparation for a late forenoon operation begins at an early hour, perhaps 6 or 7 a.m., when an intern or nurse places bare ice bags around the tourniquet region which the surgeon has previously selected and secures them firmly with a bandage or towel so as to chill the entire circumference of the limb at this level.

### Sedative for Psychic Comfort

At the same time, or later, a sedative may be given by mouth or hypodermic. This is not needed as a contribution to the anesthesia but only for psychic comfort. Therefore, the choice of the drug and the dosage and the question whether to omit it entirely are decided altogether according to the sensibilities of the individual patient.

The circle of ice bags is left in place for from half an hour to an hour, to reduce skin sensitiveness enough to prevent any important discomfort from the tourniquet. The application of the tourniquet is the most important detail in the entire preparation and, accordingly, must be done by a particularly trained resident or intern or by a member of the visiting staff.

The site for the tourniquet may be at any convenient distance (6 inches or even more) above the proposed incision, so as to provide an ample operative field. The tourniquet for a calf operation may even be placed



## Annie Doesn't Work Here Any More

IN A WAY, you can't blame Annie, either. After all these years she is a little tired of having the reek of "hospital odor" constantly in her nostrils and clinging to her clothes. And—besides being a darned good hospital worker—Annie also knows what the score is. She knows that "hospital odor" is as out of date as a pair of Congress gaiters. Right now, Annie is on her way to a *modern* hospital where she will use Phenolor in her scrubbing, instead of an old-fashioned germicide reeking of phenol, cresol or chlorine.

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above the knee because there is no danger of impaired vitality in the parts below the tourniquet.

Narrowness and elasticity are the desired characteristics of the tourniquet; a ½ inch tube of pure gum rubber is used in this hospital. The application must be tight enough to stop all circulation, which in the thigh means extreme tightness. Two superimposed turns of the rubber tube strengthen the constriction without increasing the width. The ends are secured by two clamps for precaution against slipping. There has been no trouble from excessive tightness, even with severely sclerosed arteries in the leg; arm padding or other precautions may guard against crushing of nerves against bone.

#### Looseness Is Chief Hazard

The principal danger is looseness which allows a little warm blood to enter and thus hinders complete anesthesia. The best test for an inflow of blood, too small to be detected by palpation or the oscillometer, is to watch the foot. If it remains blanched the hemostasis is complete, but if it gradually becomes blue the tourniquet should be reenforced (not removed even temporarily).

Refrigeration, by whatever method used in the institution, should be begun immediately after application of the tourniquet. Ice is always dependable for furnishing a temperature that is neither too high nor too low. If apparatus is employed, a skin temperature of 40°F. is considered optimal and it allows a margin of error of several degrees upward or downward without harm. Anesthesia is actually obtainable with temperatures somewhat above 50° F., but levels slightly above freezing are believed to be safest for complete preservation of tissue vitality.

It is true that anesthesia will result from simple anoxia of nerves if the blood flow is stopped for a sufficiently long time but that is not the process in this method. Refrigeration anesthesia employs the well-known physiologic "cold block" of nerves. It is only necessary to reduce the temperature of the nerves low enough for this purpose.

The time required to obtain anesthesia, therefore, is the time in which cold can penetrate from the surface of the limb to the large

nerves in the interior. The skin and superficial parts lose their sensation fairly rapidly. There is also an interval in which the partially cooled main nerves have their sensation reduced and delayed but not abolished. The perfectly feasible ideal, however, is that the sciatic nerve can be cut without any awareness on the part of the conscious patient. Some surgeons have been so surprised by their first experience of this kind that they have cut the nerve several times to be assured of the painlessness.

It is possible to operate after briefer refrigeration by resorting to procaine injections of the nerve trunks but with adequate chilling this supplement is entirely unnecessary. This adequate penetration of cold requires periods of time proportioned to the thickness of the part, *i.e.* from 2½ to 3 hours for a thigh, from 1½ to 2 hours for a calf, 1 hour for a foot or ankle, from 15 to 30 minutes for a finger or toe.

There is a promise of future apparatus with metal instead of rubber applicators that will withdraw warmth from tissues so rapidly as perhaps to halve these time intervals. Convenience may thus be served, but the final effect will be no different. The absence of harm from prolonged asphyxia with cold makes the method extremely elastic. If there should be an accidental delay in the start of the operation, extending the refrigeration time to six or eight hours or even longer, no harm need be feared from tourniquet pressure or chilling.

#### Preserved From Two to Four Days

Obviously these periods are trivial in comparison with the experiments in which the legs or tails of animals have been preserved without circulation at ice temperature for from two to four days. This is one of the advantages that could make the method so highly useful for military emergencies, if the convincing experiences of some lower officers could be impressed upon the higher staff.

The refrigeration is kept in place while the patient is transported to the operating room and until the surgeons are all scrubbed and waiting. The ice or apparatus is then removed, the skin is sterilized in any way preferred and the operation is performed by the usual technic and

with the added convenience and speed made possible by the tourniquet, which permits slashing through blood vessels without stopping to dissect and tie them in advance.

When the operation is finished and the wound is ready to be closed, the tourniquet is removed. Anesthesia persists indefinitely until removal of the tourniquet and for from half an hour to an hour afterward, depending upon temperature of the room and in the limb. There is ample time for ligating any bleeding points that appear with the rush of returning circulation and then to suture in any way desired, no undue haste being necessary at any stage.

#### Closure Method the Same

The method of closure and the use or omission of drainage are the same as with any other mode of anesthesia. Also, there is no known harm in allowing an immediate return of normal temperature in the stump; in sufficiently favorable cases this has occasionally been done and dressings have been applied just as with any other method.

The actual use of refrigeration, however, has been almost wholly for cases with serious arteriosclerosis, gangrene, infection and other complications. The local circulation in such cases is frequently unequal to the demands of postoperative inflammation and the other processes which have notoriously often resulted in sloughing of flaps heretofore.

Reduced local temperature restrains the inflammatory reaction within limits which the narrowed vessels can supply; it reduces tissue metabolism, checks infection, controls edema and the accompanying harmful pressure and prevents pain. These effects, which may be lifesaving in critical cases, are presumably helpful in all cases, so that a temporary cooling of the stump after amputation can be recommended regardless of the method of anesthesia. Therefore, we routinely apply light dressings of only a few layers of gauze and outside of them four or more ice bags, or preferably apparatus, to maintain a local skin temperature of about 15°C. or 60°F. for the first twelve to twenty-four hours. The ice bags are gradually removed and the dressings thickened, so that the stump is restored to

## AN OLD FAMILY RECIPE THAT BECAME MEDICAL HISTORY



N 1775 William Withering investigated a family recipe held by an old lady in the county of Shropshire, England, who "had sometimes made cures of cases of dropsy after the more regular practitioners had failed." How Dr. Withering gleaned from her the ancient family secret is not known but he found that while the concoction was composed of 20 or more different herbs the active ingredient was none other than the foxglove.

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normal temperature in the course of two or three days.

The methods used for refrigeration vary with the facilities in different places and may be reviewed as follows.

1. Cracked or shaved ice is the original, and also the simplest, means of chilling. It is available in practically all hospitals, and commonly for emergencies outside hospitals. One manufacturer advertises a machine that begins to supply flaked ice within a few minutes after the electric current is connected, and the existence of this equipment near the fighting fronts assures an ice supply for many troops in the tropics.

Ice has the further advantage of being cold enough and yet not too cold, since it cannot freeze tissues and therefore requires no special watching. The main disadvantages are cumbersomeness and sloppiness in handling. It has generally been enclosed in rubber sheets, which all hospitals possess. The details have been described elsewhere, namely, the layer of ice on a rubber sheet in the bed, the limb to be laid on this and buried in ice up to 2 or 3 inches above the tourniquet, with the rubber sheet wrapped around it and, preferably, with a woolen blanket around the whole to reduce melting.

#### Water Can Be Drained Off

First attempts may cause considerable mess, but with the head of the bed elevated and the lower end of the rubber sheet draining into a bucket at the foot of the bed there need be no wetting of the bed or patient. Likewise, at the time of removal in the operating room it is unnecessary to spill the ice, which is properly lifted off in a compact bundle with the rubber sheet. Practice and skill make this method reasonably neat and convenient.

2. Another original plan was the use of ice with water in a tall pail, which is convenient for immersion of an arm or of a leg below the knee.

3. Several authors<sup>3</sup> have devised special boxes for holding the ice,

<sup>3</sup>Gordon, J. D.: Refrigeration Box for Amputation. *Am. J. Surg.* 58:453-455, 1942.

Kennedy, J. A.: A Technic and Device for Application of Ice Anesthesia for Amputation of Extremities. *U. S. Nav. Med. Bull.* 41:226-230, 1943.

Segerberg, L. H.: Ice Anesthesia. Methods of Mortality Reduction in Amputations for Arteriosclerotic Gangrene. *Am. J. Nurs.* 43:797-798, 1943.

with a padded or curtained opening for the limb. The rigidity sometimes makes these unsuitable for deformed limbs. The choice between these devices and the simple rubber sheet is merely one of convenience.

4. Bare ice bags avoid the messiness of ice and can be used sometimes, more for treatments than for surgical anesthesia. For the latter purpose the cooling may be insufficient, especially because of the spaces between the bags. The thickness of the rubber in some bags prevents attaining a sufficiently low temperature.

All this objectionable insulation can be overcome by lowering the temperature with salt added to the ice in the bags, but the danger of freezing positively contraindicates this use of salt unless the physician or nurse will make frequent tests of skin temperatures in all regions above the amputation level for assurance against this danger.

#### Has Some Disadvantages

In the absence of special apparatus the use of ice bags is unavoidable for prolonged treatments and with sufficient care the results can be successful, but the disadvantages are the weight, the labor and watchfulness in refilling and the liability to displacement of the bags with movements of the patient. A variant of this method is the use of cloth bags for iced wet dressings.

5. Air cooling has been used for treatments<sup>4</sup> but not for surgical anesthesia. When the atmosphere is cool enough, the current of an electric fan directed against a limb was found by Webster to be beneficial for frostbite or immersion foot and it might presumably serve similarly for burns. Greene<sup>5</sup> improvised a cabinet containing two chambers separated by a perforated partition; one compartment holds the patient's extremity and the other, a selected amount of carbon dioxide ice.

6. Electrical refrigerating apparatus for this special purpose is also

<sup>4</sup>Webster, D. R., Woolhouse, F. M., and Johnston, J. L.: Immersion Foot. *J. Bone & Joint Surg.* 24:785-794, 1942.

Bigelow, W. G.: The Modern Conception and Treatment of Frost Bite. *Canad. M.A.J.* 47:529-534, 1942.

White, J. C.: Vascular and Neurologic Lesions in Survivors of Shipwreck. *New England J. Med.* 228:211-222 and 241-247, 1943.

Ungley, C. C.: Treatment of Immersion Foot by Dry Cooling. *Lancet* 1:681-682, 1943.

<sup>5</sup>Greene, R.: Cold in Treatment of Damage Due to Cold. *Lancet* 2:695-697, 1942.

available. It consists of a compact noiseless unit that pumps fluid at a fixed temperature to various types of applicators. Some of these are in the form of blankets containing rubber tubes of sizes suitable for covering the entire body or all or part of a limb or any desired areas on the trunk. Metal applicators may shorten the time required for surgical refrigeration.

The largest blankets can be used for reducing fever or inducing "artificial hibernation," and small metal applicators are adapted for insertion into various body cavities or into wounds, according to the methods of Temple Fay. There is also available an air chamber at regulated temperature for treatments of frostbite and immersion foot and also as an improvement over ice bags for amputation stumps.

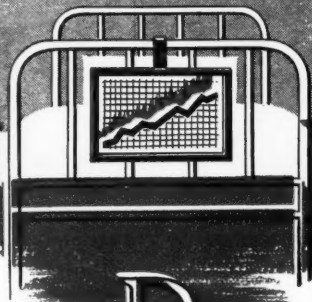
The only advantage of the electrical apparatus over ice for operative anesthesia lies in convenience and avoidance of mess. As the cost of the complete equipment is nearly \$700, hospital executives may be dubious of such an expenditure for this purpose unless the number of amputations is particularly large. The main superiority of the apparatus is for various kinds of treatments.

#### Best for Prolonged Treatment

The light weight, the thermostatic regulation and the freedom of movement permitted to the patient are advantages that cannot be duplicated by ice or makeshift devices for any conditions requiring prolonged treatments, notably embolism and burns. The same machine can serve for treatments with heat as well as cold, since it can furnish dependable constant temperatures from below freezing up to as hot as can be endured.

The practical result is that the apparatus is usually taken over by the physical therapy department of the hospital, which keeps it busy day and night for manifold uses. A special type developed for military needs measures only 14 by 14 by 28 inches, weighs only 200 pounds and can be operated by the motor of any ambulance, truck or airplane. Anesthesia is complete in forty-five minutes.

The uses of reduced temperatures in the treatment of burns and circulatory occlusions will be discussed next month.



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**D**EPLETION of the protein depots is a constant threat during fever, and in many cases diet alone is inadequate to compensate for the increased nitrogen loss. Parenamine, parenterally administered, effectively restores and maintains positive nitrogen balance in most cases; thus it speeds recuperation—aids in preparing the patient for surgery and in shortening convalescence.

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# Renal Function Tests

EDWIN P. HIATT

Associate Professor of Physiology  
University of North Carolina School of Medicine

**G**REAT advances in the knowledge of the physiology of the kidney have been made in the last decade or so, particularly through the application of clearance methods to measurement of the fundamental renal processes. Such investigations, espe-

cially those by the group working at the New York University School of Medicine, have made it possible to determine accurately the several physiological entities (glomerular filtration, renal blood flow, effective tubular mass) that contribute to kidney function.



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### Measurement of Physiological Processes in Renal Function:

1. *The volume of fluid filtered through all the glomeruli into the renal tubules per unit of time.* This measurement of the glomerular filtration rate, usually expressed in cc. per minute, is the cornerstone of all quantitative renal investigation. Inulin, mannitol, dulcitol, sorbitol and sorbitan have been demonstrated to be cleared from the plasma at the rate of glomerular filtration, which averages around 130 cc. per minute in normal resting man.

2. *The volume of plasma perfusing the renal excretory tissue per unit of time.* Diodrast and sodium p-aminohippurate are the most thoroughly investigated of the substances known to have a rate of clearance closely approaching the renal plasma flow. At low plasma concentrations these substances are almost completely cleared from the plasma as it passes from the renal artery to the renal vein. The fraction that escapes excretion can reasonably be assumed to be contained in that part of renal blood flow which by-passes the excretory tissue through arteriovenous anastomoses or connective tissue vessels. Because these substances are not completely extracted from the renal blood the clearance of diodrast or p-aminohippurate is regarded as measuring only the physiologically effective renal plasma flow. In normal resting man this value is about 700 cc. per minute.

3. *The quantity of functional tubular tissue.* This measurement is obtained by measuring the maximum quantity of a substance that can be transported by secretory activity of the tubule cells in a given time. This value, commonly called T<sub>m</sub> and expressed in mgm. per minute, represents the maximum secretory capacity of the tubules for that substance and can be expected to vary with the mass of functional secretory tissue.

The titration can be made with a substance that is transported from the internal fluid of the lumen to the external interstitial fluids or with a substance moved in the opposite direction. Glucose, as an example of the former, and diodrast, as an example of the latter type of substance, have been most thoroughly investigated. A normal resting man can reabsorb from the renal tubules about 375 mgm. of glucose per minute and excrete, by tubular activity alone, about 50 mgm. of diodrast per minute.

Glucose T<sub>m</sub> reflects glomerular activity as well as tubular function because a tubule attached to a nonfunctional glomerulus is completely eliminated from glucose reabsorption although it may still be nourished by interstitial fluid or by capillaries from



# WHEN SLOW HEALING IS A PROBLEM

Some types of burns and wounds are characterized by their tendency to heal slowly. Frequently these conditions are stubborn, unyielding.

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adjacent nephrons. Diodrast Tm is less affected by variations in glomerular function. Certain agents, mostly humoral, have been shown to affect diodrast Tm. It is decreased after hypophysectomy and increased by administration of sex hormones, thyroxin or by high protein diet.

It is also important to note that the Tm of one substance may be depressed by the simultaneous transport of another substance through the same renal tubular cells. For example, phenol red and diodrast may interfere with each other and xylose and glucose may interfere with the tubular reabsorption of

each other. But diodrast Tm and glucose Tm can be determined simultaneously without interference and in normal individuals these values remain remarkably constant over considerable periods of time.

These three measurements together make up an ideal renal function test. However, there are as yet few places where such tests are carried out. The reasons for this lag between the acquisition of scientific knowledge and its application are obvious. It requires more time and effort to carry out these measurements than to make the usual tests of renal function. Furthermore,

the considerable amount of analytical work means specially trained technicians.

Finally, the clinical methods in current use are established in the literature correlated with pathological observations so that one hesitates to abandon precedent to use methods giving values that cannot be directly compared with others in the literature.

Let us look critically at the renal function measurements in common use with the purpose of determining just what they measure in terms of our new knowledge of renal physiology largely gained by the use of the clearance methods discussed in this paper. The tests in common use vary from the purely qualitative to some that are almost quantitative and will be considered in this order.

#### Maximal Concentrating Capacity:

This test is usually carried out by measuring the specific gravity of the urine after a period of water deprivation or after an injection of the anti-diuretic hormone of the posterior pituitary gland. It represents the ability of the kidneys to excrete solids in a minimal amount of water and reflects the activity of the tubules.

The normal range of specific gravity under these conditions is rather arbitrarily set at 1.024 to 1.032. As the renal parenchyma is destroyed the concentrating power of the kidneys decreases so that the specific gravity falls progressively to 1.010 at which point it becomes fixed in spite of continued deterioration of the kidneys. This method is in no sense quantitative and lacks sensitivity, particularly at either end of the range.

Maximal concentrating capacity may be normal at a time when clearance methods reveal a considerable renal impairment. On the other hand, once the specific gravity has fallen to 1.010, further deterioration of the kidney is not indicated by this method.

The ability of the kidneys to form a dilute urine after the administration of water is even less sensitive as an indication of the functional state of the kidney.

#### Phenolsulfonphthalein Excretory Capacity:

This measure is obtained by determining the fraction of a standard intravenous or intramuscular injection of phenolsulfonphthalein dye (phenol red) excreted in a standard period of time and relating the values so obtained to a series of normals. The dye is excreted by both glomerular filtration and tubular excretion but the contribution of the former process is small owing to the fact that a large fraction of the plasma content of phenol red is bound



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to plasma protein and not available for filtration. Consequently, it is essentially an indication of the relative integrity of tubular function and renal blood flow.

As originally designed, 6 mgm. of dye were injected. The urine was collected and analyzed at one and at two hours after the injection to determine the percentage of the injected quantity of dye excreted in this period. The excretion of from 40 to 60 per cent in the first hour and of from 60 to 85 per cent in two hours was considered evidence of normal renal function. This procedure does not give a quantitative

measure of any renal function and considerable renal damage may occur before the excretion drops below the normal range.

It has been demonstrated that the sensitivity of this method can be considerably improved by shortening the collection periods since in normal persons 30 per cent or so of the dye is excreted within the first twenty minutes.

Clearance of phenol red in normal man at low plasma concentrations (about 1 mgm. per cent) is around 394 cc. per minute which indicates that this clearance measurement could be used to

indicate relative variations in the effective renal blood flow.

#### Urea Clearance:

Normal urea clearances average around 70 cc. per minute when the rate of urine flow is between 1.5 and 12 cc. per minute. This is about half the rate of glomerular filtration. Approximately half the urea filtered at the glomerulus escapes from the tubules back into the blood.

The urea clearance in this range of urine flow varies with the filtration rate and is useful in indicating changes in this renal function. This proportionality of the urea clearance to the glomerular filtration rate is lost when the urine flow is increasing rapidly, when it drops below 1.5 cc. per minute and late in the course of kidney disease.

The convenience of making clearance measurements with a substance already present in the plasma is offset by the fact that this measurement is only semi-quantitative in terms of measuring any renal function.

#### Blood Urea:

When all nonrenal factors are constant the blood urea concentration varies inversely with the urea clearance. Hence, an increased blood urea under these conditions could be interpreted as a sign of diminished glomerular filtration. However, under ordinary conditions the variations in such nonrenal factors as water balance, liver function and protein intake, particularly the last, can completely obscure the significance of any but the most extreme changes in blood urea.

#### Creatinine Clearance:

In man creatinine is excreted by glomerular filtration and tubular excretion so that its clearance is in excess of the glomerular filtration rate. The amount of this excess is dependent on the plasma concentration of creatinine, ranging from 40 per cent at a plasma concentration of about 10 mgm. per cent to 10 per cent excess at 120 mgm. per cent.

It has been suggested that the clearance of "endogenous creatinine" is a measure of the filtration rate. This "endogenous creatinine" consists of a mixture of substances yielding color with alkaline picrate. The total quantity of these substances found in the plasma varies with the method of protein precipitation, but with no method so far reported is their clearance consistently identical with the inulin clearance.

The effect of the tubular contribution and the source of variation caused by the presence of chromogenic substances which are not creatinine can both be minimized by giving enough



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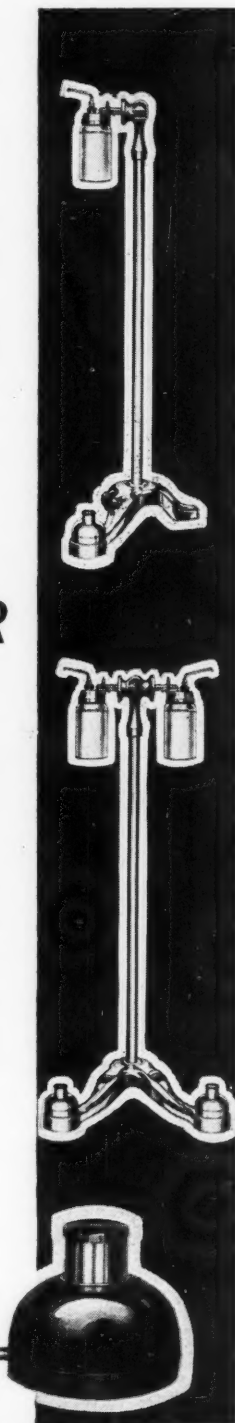
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exogenous creatinine, preferably by constant intravenous infusion, to raise the plasma creatinine concentration to a high level.

Clearance values obtained in this manner have an empirical usefulness in reflecting glomerular activity. These clearances are in excess of the actual rate of filtration but they approach an actual measurement of one renal process, the filtration rate, more closely than any other commonly used clinical method. Fortunately for renal investigation, creatinine can be used as an accurate measure of the glomerular filtration rate in the dog.

It is certain that we shall soon see a substitution on a large scale of the quantitative measurement of the separate physiological processes that determine kidney function for the methods now commonly applied in the clinic. The factors that are working to bring this substitution about are the rapid progress in the simplification of the methods, the spread of the newer knowledge of renal physiology and the growing number of investigations correlating the glomerular filtration rate, the effective renal plasma flow and the maximum secretory capacity of the tubules with pathological processes.

No one could deny that we need more sensitive and accurate measurements of renal function, not only to make the decisions that go with surgery and obstetrics in patients with damaged kidneys but also more accurately to evaluate the effects of therapeutic measures.

## CLINICAL BRIEFS

Conducted by E. M. Bluestone, M.D.

### Recording Blood Pressure

In 1932, Dr. Kurt Lange devised an instrument which gives continuous records of the systolic, as well as diastolic, blood pressures. The instrument was explained in "A Recording Sphygmotonomograph: A Machine for the Continuous Recording of Systolic and Diastolic Arterial Pressure in Man" in the *Annals of Internal Medicine*, March 1943.

This device was modified and applied in the investigation of pressure changes during actual flying conditions, and under the influence of excitement, nervous unrest, carbon dioxide baths and change in position on tilt table.

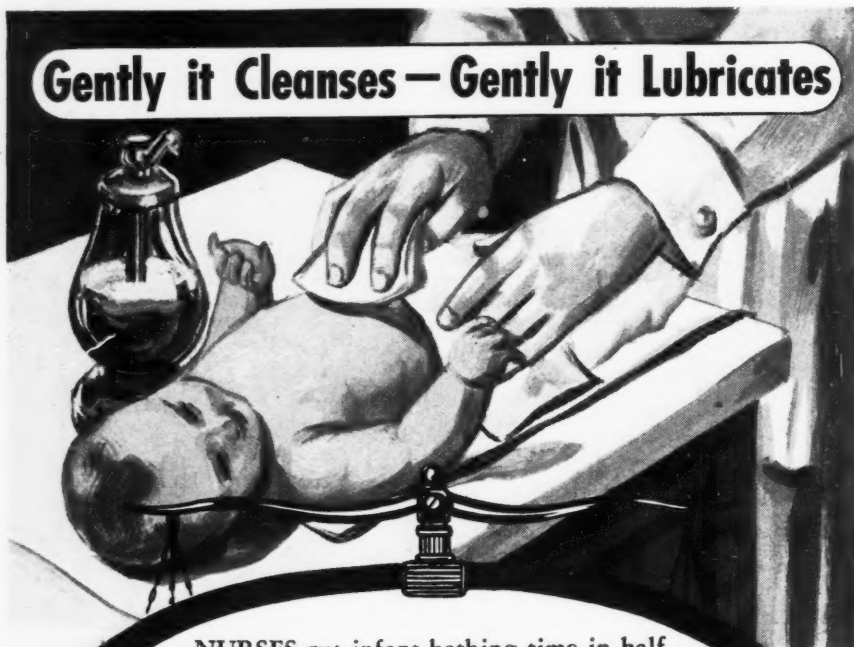
The instrument was again modified with a light beam-photo cell device, substituting for the use of the simple mechanical contact device. The pulse rate could be counted from the oscillations made by the pointer of the indicating instrument.

The device has been tested in 109 cases in which the average systolic pressure was .06 mm. Hg. higher than the auscultatory values found. The diastolic pressure averaged from 98 cases was 4 mm. Hg. lower than the values found by auscultation. The author reports the uneven run of the systolic blood pressure in normal persons. Mayer-Traube-Hering waves between 15 and 30 seconds long and between 4 and 12 mm. Hg. in height were found in many patients and seemed to be largely influenced by the emotions. When the waves disappeared during anesthesia, the author reports the anesthesia to be unduly deep, causing loss of normal circulatory reactions. The waves seemed to be less in patients with excessive hypertension and also disappeared in shock.

The author agrees "that slight excitement can cause considerable increase in blood pressure," and "that merely watching the blood pressure machine can cause increases up to 15 mm. Hg. in normal persons."

In order to obtain a steady non-fluctuating sphygmotonomogram it is necessary to have the patient under basal conditions.—ABRAHAM JEZER, M.D.

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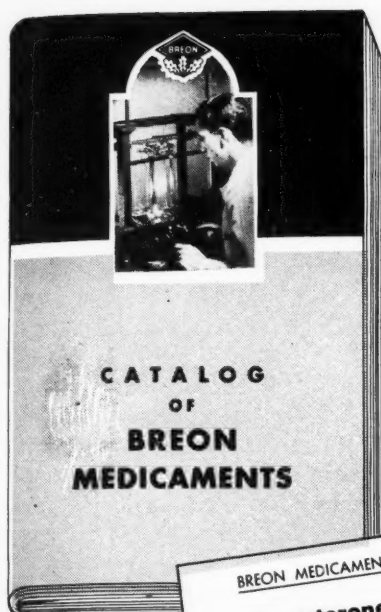
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Each vial is accompanied by a 10 cc size ampul of Phosphate Buffer Solution which, added to the vial of Gonadotropin by means of a sterile syringe, furnishes a fresh solution having a potency of 100 and 500 International units in each cc, respectively.

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Supplied in 1 cc ampuls and 10 cc vials.

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#### Progesterone in Oil Solution

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A solution of the hormone of the corpus luteum, physiologically standardized by the Corner-Allen rabbit method.

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1 mg. in 1 cc ampuls  
10 mg. in 5 cc vials  
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A purified extract of estrogenic sterols, principally estrone and estradiol, occurring in equine urine.

Estrogenic Substance-Breon is uniform in purity. It is stable to light and to a moderate degree of heat. The estrogenic potency remains constant for an indefinite but considerable period.

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Supplied:  
Tablets of 1/2, 1, and 2 grains.

# *The Kosher Kitchen*

contributes to the patient's welfare

## HAZEL BRADBURN

Dietitian  
Jewish Hospital, St. Louis

**T**O ESTABLISH and maintain orthodox kosher kitchens successfully one must appreciate and respect the fact that the dietary regulations are based upon the Mosaic laws and have a deep religious significance.

The term "kosher" is applied to all foods prepared in accordance with the Jewish dietary laws. The antithesis of kosher is "tref," from the Hebrew meaning "animal torn by wild beasts." The keeping of kosher law is dependent not only upon the source of the food but upon the method of preparation and the serving of the food.

### Basis of Religious Festivals

Before giving an explanation of the operation of kitchens that make it possible to maintain such a service, I should like to review briefly the important religious festivals that are observed by those of the orthodox faith. While these festivals are in part observed in relation to food, the significance back of them gives us an understanding and appreciation of the faith, which is the basis for this observance.

One of the most important and elaborate of the Jewish festivals is the Passover, which lasts eight days. It is celebrated in commemoration of deliverance from bondage in Egypt. Two ceremonial evening meals called "Seders" are served the first and second nights of the festival. Special dishes are served that symbolize the hardships which the Israelites went through during their bondage. At these two meals the narrative of Exodus is recited and praise is given for deliverance. At all the meals during this festival only unleavened bread (matzoth) is eaten. This is done in memory of the fact that the Jews hastening from Egypt had no time to leaven their bread.

The most sacred Hebrew holy day is Yom Kippur (Day of Atonement).

This is a day of prayer and fasting. The holiday begins on the eve of Yom Kippur, when the fast begins, and continues throughout the next day with prayers for forgiveness at the temple all during the day.

Second in importance to the Day of Atonement is Rosh Hashana, the Jewish New Year, also known as the "Feast of the Trumpets." This holy day is held in great reverence as the day of judgment. The ten days from Rosh Hashana to and including Yom Kippur are observed as days of penitence.

One of the most joyous of Jewish feasts is the "Feast of the Tabernacles," also known as the "Feast of Ingathering," or Sukkoth. This festival closes the fruit harvest. A distinctive feature of this feast is the erection of booths covered with thatched roofs and filled with fruits of the harvest on the grounds of the synagogues and in the homes. At this time the Jewish Hospital, St. Louis, receives many large baskets of fruits and vegetables from these booths.

The preparation of food according to Jewish dietary laws has significance not only for the festival seasons but also for all meals during the entire year. These dietary laws are established upon a definite ritual based upon the Scriptures.

Meat and milk products are never served in the same meal. The eating of milk products along with or immediately after meat is "unkosher." Even the use of the same dishes, utensils or towels is forbidden. This requires special facilities for the preparation and serving of food and will be described later in this paper.

Kosher meat is the flesh of animals that chew their cud and have cloven hoofs, such as the cow, sheep or lamb. All fish that have scales and fins may

be eaten. The animals and fowl used for the meat meals in accordance with the rabbinical law must be slaughtered by a specially trained and pious Jew. He is known as a "Shohet" and has a high and honorable standing in the Jewish community.

The slaughtering of the animal is done with a sharp knife severing the vagus nerve, the carotid artery and the jugular vein with one stroke. This is considered a humane method of slaughtering because the animal is rendered unconscious at once. The blood is immediately drained from the body of the animal. The meat must then be salted and soaked to remove all traces of blood. The Shohet also inspects all organs of the animal for any sign of disease before the meat is placed upon the market for use.

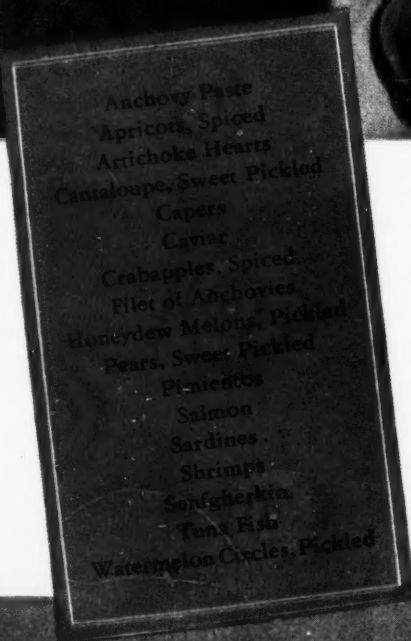
In order to maintain a dietary service that will offer kosher food to the patient confined to a hospital, special kitchen equipment and personnel are essential. Two separate kitchens are used in our hospital in order to serve the meat and milk meals. A Jewish cook with special knowledge of the dietary laws is placed in charge of each and is directly responsible to the dietitian in charge.

### Special Equipment Used

Each kitchen is equipped with stoves, refrigerators, sinks, china, silverware, glasses and all utensils necessary for the serving of food. Each kitchen has its own soaps and cleansing materials. In order that the equipment in the two kitchens will at no time be mixed or exchanged, special markings are used. The equipment in the meat kitchen is marked by a red painted band while that in the milk kitchen is marked with a blue line.

The kosher kitchen equipment is checked constantly to be sure that

# HEADQUARTERS FOR *Quality Food*



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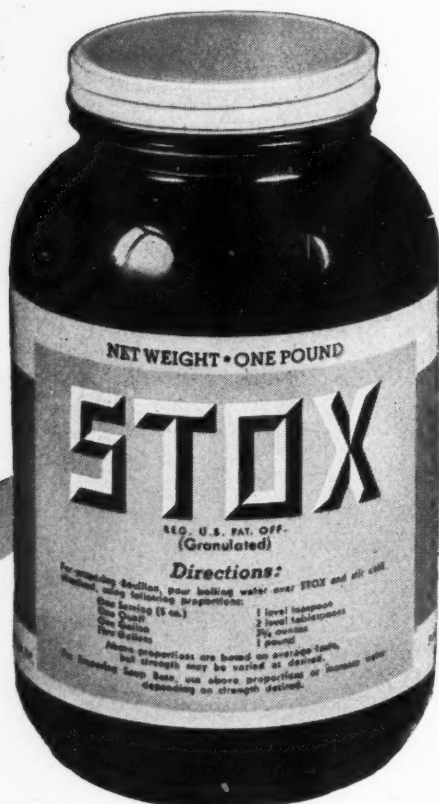
Discriminating food purveyors naturally look to Sexton's for relishes, appetizers, hors d'oeuvre—the details that make the meal. If you can get them anywhere, you can get them here. Such delicacies as anchovies, sardines, tuna, so rare of late, will soon be available as the world markets reopen. Then, as always, you'll find Sexton first with the finest.





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**Gives food that good  
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**Gives EXTRA B Vitamins**

### As hot bouillon

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Stox is perfect for adding good taste, good B vitamins to entrees with vegetables, noodles, etc. It makes stews with less meat. It lets you use left-overs that might otherwise be wasted. Ideal in gravies, goulashes, aspics—to replace the stock pot.

**O**NCE used in your menus, Stox will stay there. It is nourishing. It saves you time. It saves work. And—it tastes so good people come back for *more*.

Serve it as straight bouillon. Use it to "build up" other foods. Stox can make a plain dish a popular favorite, give that good "home quality" taste so hard to achieve in volume cooking.

There's no meat in Stox at all—but it has a rich meat-like flavor dietitians welcome these days. With Stox you can get better value out of your meat points! With Stox you can serve meatless dishes that taste as if meat had been cooked right in the same pot!

Stox supplies B Complex Vitamins—especially B<sub>1</sub> so frequently low in modern diets. One level teaspoon supplies  $\frac{1}{4}$  of the daily adult minimum B<sub>1</sub> requirement.

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the markings are kept distinct. Maids and bus boys who handle the trays are given instructions as to the significance of these markings on dishes and equipment, since it is partially their responsibility to keep all equipment for the two kitchens separate.

During Passover special dishes, utensils and silverware are used. All equipment and china routinely used are removed from the kosher kitchens at that time. The kitchens are thoroughly cleaned, walls and windows are washed and the Passover equipment is brought in to be used for one week only. At the close of the Passover the routine equipment is again brought back into the kitchens.

When the kosher kitchens in the

Jewish Hospital of St. Louis were first organized it was thought advisable to appoint a rabbi who would supervise and assist the dietitian in maintaining strict religious principles. The rabbi, who is a busy person, is assisted by two Jewish women who are familiar with the dietary rules having religious significance. This supervision is entirely from a religious angle. The organization, buying and control of food for the kitchens is a matter for the supervision of the dietitian alone.

We have been fortunate in working with the same rabbi for a number of years and his contributions have been invaluable in maintaining this service. He assisted in the establishing of our kitchens and he has

continued to take a keen personal interest in them.

We have found it advisable to ask the rabbi to present a lecture to the student nurses explaining the religious significance of the dietary laws. This helps create a better understanding of the value of the kosher law as part of the Jewish religion and its therapeutic value to the patient.

We serve two "milk" meals a day, breakfast and the evening meal. Our "meat" meal is at noon. The following menus are typical of the meals served:

**Breakfast**  
(Milk Meal)  
*Fruit juice or fruit*  
*Cooked cereal*  
*Soft eggs*  
*Toasted bread*

*Butter*  
*Coffee with cream and sugar*  
*Milk*

**Dinner**  
(Meat Meal)  
*Chicken broth with matzoth balls or vegetable soup and noodles*  
*Roast chicken (for light diets)*  
*Veal shoulder roast—meat balls or veal chops (for general diets)*  
*Whipped potatoes (whipped with hot chicken fat)*  
*Carrots cooked with the meat*  
*Vegetable salad*  
*Fresh or canned fruit*  
*Jewish rye bread (no butter)*  
*Hot tea with lemon and sugar*

**Supper**  
(Milk Meal)  
*Beet borsch or rice soup*  
*Cottage cheese with smetina or baked fish or creamed tuna*  
*Baked potatoes*  
*Creamed spinach with grated hard egg*  
*Fresh or canned fruit salad*  
*Baked custard or pudding*  
*Bread and butter*  
*Coffee with cream and sugar or cocoa*  
*Milk*

The kosher service that we have been able to provide for the patients is a source of real satisfaction not only to the dietitian but to the physicians and nurses as well. Knowledge of the customs and religious beliefs essential to the serving of kosher food enables us to contribute to the well-being of the patients. We feel that it contributes in a large measure to the progress of the patient because he is able to remain in the hospital for treatment and yet carry on the food ritual teachings that he holds most sacred.

## Army Commissions Dietitians

THE second class to complete its year of internship at the Fitzsimons General Hospital Dietetic Training School, Denver, was graduated and its members were commissioned as second lieutenants on October 31. Brig. Gen. Omar H. Quade presented the diplomas to the class.

These diplomas and commissions climaxed four years of college study and one year's internship in a dietetics training course approved by the American Dietetic Association. Each of the students has a bachelor of science degree in nutrition.

Maj. Anthony Eckert, director of dietetics, presented the class to Gen-

eral Quade. The oath of office, commissioning the graduates as Army medical department dietitians, was administered by Maj. A. F. Uhl Jr. Second lieutenant bars were pinned on the graduates by Capt. Mildred Allbritton, chief of the dietetic training school, and by Lt. Maryethel Meyer, instructor in the school.

The newly commissioned officers proceeded to basic training November 1.

At the present time there are 18 students completing the second half of their internship at the training school and on November 1 a new class of 18 students was accepted.





FLUFFY LEMON BREAD PUDDING

## Streamline Desserts

### *The Baker's Way*

**ELLEN HUFF SEMROW**

Home Economist, American Institute of Baking, Chicago

**B**UTCHERS and bakers and candlestick-makers and hospital dietitians, confronted with food shortages and labor scarcity, have had to streamline their tasks. In spite of the problems of special diets and the frequent turnover of patients, menu building in hospitals today must hold to the same high nutritive standards and appetite-tempting values as always. More intelligent thought and forehandedness are required than ever before.

Many hospitals are finding it simpler and less expensive to use bakers' products, bread, plain cakes and cookies. Enrichment of bread, the high nutritive value and deliciousness of bakery foods are making these acceptable and desirable in many diets. This has been accomplished in the face of war-time conditions without sacrificing standards

of production and with savings for the baker's customers. Dietitians will find that the use of bakers' products simplifies the dessert problem, cuts the kitchen time and the demand on equipment. These ready-to-use foods require only a "dressing up" for tray use.

The following formulas use various types of these products. They have been developed with an eye to economy, ease of preparation, simplicity of service and simple dietary needs. They will meet the most discriminating demands of the hospital staff so that separate desserts need not be prepared. In developing the accompanying formulas, consideration was given to the saving of ration points, the availability of all items and their adaptability to hospital use. They use plain cookies, un-iced sponge layer or cup cakes—

items that local bakers can supply.

Attention is given to economy in the use of supplies in the inclusion of the chocolate trifle for dessert one day and the prune whip on the following. The former calls for the use of 24 egg yolks and the latter, of the 24 whites.

The nutritive values per serving have been calculated for each formula for the convenience of the dietitian planning the menus.

#### Nut Sauce

*Forty-eight Servings*

*Three Tablespoons Each*

1 lb. fortified margarine  
 $\frac{1}{2}$  cup ( $2\frac{1}{2}$  oz.) cornstarch  
 11 oz. brown sugar  
 $1\frac{1}{2}$  qt. boiling water  
 $2\frac{2}{3}$  cups chopped nuts (walnuts preferred)  
 $\frac{1}{3}$  cup lemon juice

Melt margarine in top of double boiler. Combine cornstarch and brown sugar and add to margarine, mixing thoroughly until well blended. Add water and mix well. Cook fifteen minutes, stirring constantly until sauce is thick and smooth. Add nuts and lemon juice. Serve hot over any plain cake.

#### Nutritive Values per Serving

Protein	1.7 Gm.
Fat	13.2 Gm.
Carbohydrate	10.5 Gm.
Calories	173
Calcium	.049 Gm.
Phosphorus	.398 Gm.
Iron	.44 Mg.
Vitamin A	245 I.U.
Thiamin	44 Mcg.
Riboflavin	—
Niacin	—
Ascorbic Acid	—
Vitamin D	—

#### Fluffy Lemon Bread Pudding

*Forty-Eight 4 Ounce Servings*

1 gal. scalded milk  
 $1\frac{1}{2}$  gal. cubed enriched bread  
 24 egg yolks, beaten  
 2 lb., 11 oz. sugar  
 2 tsp. nutmeg  
 $\frac{1}{4}$  cup grated lemon rind  
 2 tsp. lemon extract

#### MERINGUE:

24 egg whites  
 1 lb., 5 oz. sugar  
 2 tsp. lemon extract

Pour milk over bread. Mix and let stand fifteen minutes, or until bread is soaked. Add beaten egg yolks, sugar, nutmeg, lemon rind and lemon extract. Mix well. Pour into two well-greased 9 by 14 by 2 inch baking pans. Set baking pans in shallow pans of hot water and bake in a moderate ( $350^{\circ}$  F.) oven until an inserted knife comes out clean (about one and one half



## When spirits need mending . . .

A chilled bottle of 7-Up offers needle and thread to mend and restore worn spirits. For there's a cheerful, good-natured quality about the fresh, clean-tasting drink that lifts the mood to higher levels. That's why it is said that everyone likes it . . . and it likes everyone.



• The ingredients of 7-Up are proudly stated on the back of every bottle — "contains carbonated water, sugar, citric acid, lithia and soda citrates, flavor derived from lemon and lime oils."

hours). Remove from oven, leaving baking pans in pans of hot water.

To make meringue: Beat egg whites until stiff but not dry. Add sugar gradually, continuing beating until mixture stands in peaks. Fold in flavoring. Pile on top of pudding.

Put pudding back in oven and bake an additional fifteen minutes, or until meringue is nicely browned. When cool, cut 6 by 4 to the pan.

#### Nutritive Values per Serving

Protein	7.3 Gm.
Fat	6.1 Gm.
Carbohydrate	47.3 Gm.

Calories	276
Calcium	.118 Gm.
Phosphorus	.142 Gm.
Iron	.12 Mg.
Vitamin A	406 I.U.
Thiamin	.112 Mcg.
Riboflavin	.257 Mcg.
Niacin	.42 Mg.
Ascorbic Acid	—
Vitamin D	23 I.U.

#### Cooky-Prune Whip

Forty-Eight ½ Cup Servings

6½ cups cooked pitted prunes  
3 tbsp. lemon juice

3 cups egg whites (2 doz. medium-sized eggs)  
2 tsp. salt  
1¼ lb. sugar  
2 qt. crushed plain cookies

Chop prunes and add lemon juice. Beat egg whites slightly. Add salt and continue beating until stiff but not dry. Add sugar gradually, continuing beating until mixture stands in peaks. Fold chopped prunes and cooky crumbs carefully into the beaten egg whites. Pile in dessert glasses and chill.

#### Nutritive Values per Serving

Protein	2.9 Gm.
Fat	1.8 Gm.
Carbohydrate	36.7 Gm.
Calories	175
Calcium	.020 Gm.
Phosphorus	.035 Gm.
Iron	1.2 Mg.
Vitamin A	559 I.U.
Thiamin	46 Mcg.
Riboflavin	84 Mcg.
Niacin	.58 Mg.
Ascorbic Acid	2 Mg.
Vitamin D	1 I.U.

#### Date-Peanut Butter Cooky Sandwiches

Forty-Eight Cooky Sandwiches

1 qt. cooked, pitted dates  
8 oz. peanut butter  
1 cup dark molasses  
8 doz. plain butter cookies (3 by 3½ inches in diameter)

Mash dates to make a fine paste. Add peanut butter and molasses. Mix well. Allow 2 tablespoons filling for each cooky sandwich.

#### Nutritive Values per Serving

Protein	3.9 Gm.
Fat	7.4 Gm.
Carbohydrate	32.9 Gm.
Calories	214
Calcium	.037 Gm.
Phosphorus	.058 Gm.
Iron	1.55 Mg.
Vitamin A	708 I.U.
Thiamin	101 Mcg.
Riboflavin	92 Mcg.
Niacin	1.71 Mg.
Ascorbic Acid	—
Vitamin D	4 I.U.

#### Chocolate Trifle

Fifty 8 Ounce Servings

1 lb. fortified margarine  
½ cup (2½ oz.) cornstarch  
3 qt. scalded milk  
12 oz. chocolate, grated  
1½ lb. sugar  
24 egg yolks, beaten  
3½ qt. cubed enriched bread  
2 tsp. cinnamon  
1 tbsp. vanilla extract

Melt margarine in top of double boiler. Add cornstarch and mix well. Add milk and chocolate. Stir con-



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# HEAT-TREATED

## "Libbey Heat-Treated Tumblers cut replacement costs at Grand Central Terminal Restaurants"

writes Mr. F. C. C. Boyd

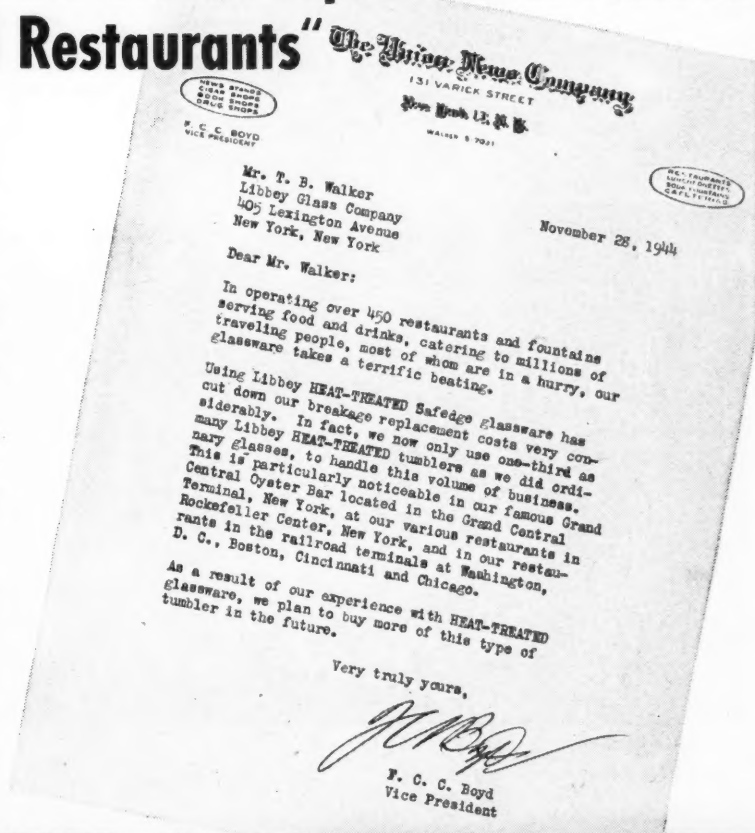
Vice President, The Union News Company

BIG USERS OF TUMBLERS, like the Union News Company, tell us that they can get by with two-thirds fewer tumblers when they use Libbey *Heat-Treated* glasses. Tumbler replacement costs are cut to the bone, because Libbey *Heat-Treated* glasses stand the "gaff" so much longer than ordinary tumblers do.

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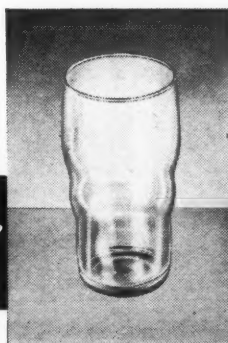
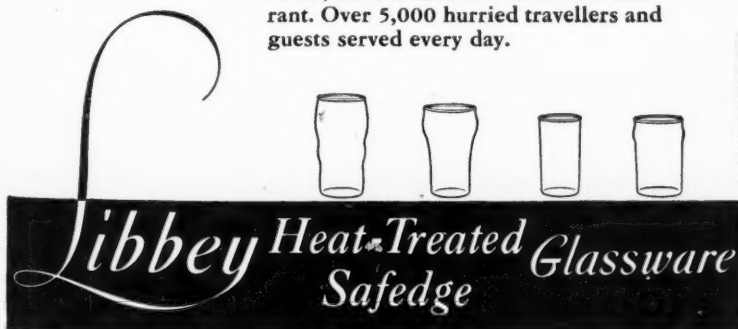
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stantly until chocolate is melted and mixture is smooth. Add sugar and stir until dissolved. Gradually add small amounts of chocolate sauce to beaten egg yolks until both are combined. Return to top of double boiler and cook ten minutes, stirring occasionally. Add bread cubes, cinnamon and vanilla extract. Continue cooking for five minutes, stirring constantly. Serve either hot or cold.

#### Nutritive Values per Serving

Protein	4.2 Gm.
Fat	14.4 Gm.
Carbohydrate	21.7 Gm.

Calories	234
Calcium	.901 Gm.
Phosphorus	1.323 Gm.
Iron	1.06 Mg.
Vitamin A	466 I.U.
Thiamin	81 Mcg.
Riboflavin	134 Mcg.
Niacin	.30 Mg.
Ascorbic Acid	—
Vitamin D	22 I.U.

#### Date-Cooky Custard

##### Forty-Eight 4 Ounce Servings

3½ cups cooked, pitted dates  
1 gal. cooky crumbs or toasted cake crumbs

½ cup grated orange rind  
2 doz. eggs  
2¼ cups (18 oz.) sugar  
1 gal. plus 1 pt. scalded milk  
2 tbsp. vanilla extract

Chop dates into coarse pieces. Arrange in bottoms of two 9 by 14 by 2 inch baking pans. Mix together cooky crumbs and orange rind. Sprinkle a layer of crumb mixture over dates. Beat eggs. Add sugar, milk and vanilla extract and beat together until sugar is dissolved. Pour egg-milk mixture over cooky crumbs. Set baking pans in shallow pans of hot water and bake in a moderate (350° F.) oven until an inserted knife comes out clean, about one and one half hours. When cooled slightly, cut custard 6 by 4 to the pan.

#### Nutritive Values per Serving

Protein	8.1 Gm.
Fat	9.8 Gm.
Carbohydrate	35.7 Gm.
Calories	263
Calcium	.136 Gm.
Phosphorus	.159 Gm.
Iron	1.7 Mg.
Vitamin A	476 I.U.
Thiamin	134 Mcg.
Riboflavin	296 Mcg.
Niacin	.66 Mg.
Ascorbic Acid	2 Mg.
Vitamin D	27 I.U.

#### Fresh Orange Sauce

1 lb. sugar  
½ cup (2½ oz.) cornstarch  
2 qt. boiling water  
4 oz. butter or fortified margarine  
1 pt. orange juice  
2 tsp. lemon extract  
1 qt. orange sections (about 10 medium-sized oranges)

Measure sugar and cornstarch into top of double boiler. Mix well. Add water and place mixture over hot water. Cook for fifteen minutes, stirring constantly until sauce is thick and smooth. Remove from heat, add butter and stir until melted. Add orange juice and lemon extract. Let cool slightly. Add orange sections. Serve over jelly roll slices or any type of plain cake.

#### Nutritive Values per Serving

Protein	.3 Gm.
Fat	1.7 Gm.
Carbohydrate	14.0 Gm.
Calories	72
Calcium	.010 Gm.
Phosphorus	.009 Gm.
Iron	.15 Mg.
Vitamin A	132 I.U.
Thiamin	31 Mcg.
Riboflavin	11 Mcg.
Niacin	.10 Mg.
Ascorbic Acid	17 Mg.
Vitamin D	—



and home forty miles away

When a shift lets out at Corning Glass Works these days, the local bus stops become very busy spots. For men and women from "40 miles around" travel back and forth each day, from home to factory, to help make the glassware so urgently needed by our Armed Forces and the Home Front.

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# Menus for February 1945

Catharine Stuart  
Henry County Hospital  
New Castle, Ind.

- |   |   |  |  |   |  |
|---|---|--|--|---|--|
| <p><b>1</b><br/>Stewed Prunes<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Tomato Consommé<br/>Hamburgers<br/>Sliced Onions<br/>Pan-Fried Potatoes<br/>Green Beans<br/>Apple Pie</p> <p>•</p> <p>Vegetable Soup<br/>Canadian Bacon<br/>Baked Beans<br/>Corn Bread<br/>Raspberry Sherbet</p>                               | <p><b>2</b><br/>Fruit Juice<br/>Eggs<br/>Toast and Jam</p> <p>•</p> <p>Cream Chowder<br/>Baked Fish<br/>Mashed Potatoes<br/>Creamed Celery<br/>Iceberg Salad<br/>Chocolate Sundae</p> <p>•</p> <p>Chile Con Carne<br/>Hard Rolls<br/>Cabbage and Apple Salad<br/>Lemon Pie</p>  | <p><b>3</b><br/>Applesauce<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Consommé With Rice<br/>Braised Short Ribs<br/>of Beef<br/>Browned Potatoes<br/>Buttered Cabbage<br/>Bread Pudding,<br/>Fruit Sauce</p> <p>•</p> <p>Cream of Potato Soup<br/>Deviled Eggs<br/>Cottage Cheese<br/>Vegetable Salad<br/>Cornflake Potatoes<br/>Apricots, Cookies</p> | <p><b>4</b><br/>Grapefruit<br/>Bacon and Eggs<br/>Doughnuts</p> <p>•</p> <p>Cream of Cauliflower<br/>Soup<br/>Baked Smoked Ham<br/>Hot Spiced Crabapples<br/>Browned Potatoes<br/>Creamed Corn<br/>Strawberry Sundae</p> <p>•</p> <p>Cream of Celery<br/>Soup<br/>Bacon and Tomato<br/>Sandwiches<br/>Potato Chips<br/>Pickles<br/>Walnut Cake</p>                   | <p><b>5</b><br/>Italian Plums<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Vegetable Soup<br/>Liver and Bacon<br/>Mashed Potatoes<br/>Parslied Carrots<br/>Coleslaw<br/>Tapioca Cream Pudding</p> <p>•</p> <p>Consommé<br/>Creamed Ham and Peas<br/>on Toast<br/>Beets<br/>Iceberg Salad<br/>Baked Apples<br/>Graham Wafers</p> | <p><b>6</b><br/>Tomato Juice<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Beef Stew With<br/>Vegetables<br/>Boiled Potatoes<br/>String Beans<br/>Hot Biscuits<br/>Ice Cream</p> <p>•</p> <p>Vegetable Soup<br/>Creamed Chipped Beef<br/>on Toast<br/>Noodle and Celery Loaf<br/>Chef's Salad<br/>Chocolate Cake</p>                      |
| <p><b>7</b><br/>Apricot Juice<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Barley Soup<br/>Spareribs<br/>Sauerkraut<br/>Hashed Brown Potatoes<br/>Buttered Carrots<br/>Apple Pie</p> <p>•</p> <p>Chicken-Noodle Soup<br/>Scrambled Eggs<br/>and Brains<br/>Baked Potatoes<br/>Vegetable Salad<br/>Hot Biscuits, Honey</p> | <p><b>8</b><br/>Bananas<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Rice Consommé<br/>Roast Veal, Dressing<br/>Mashed Potatoes<br/>Spinach<br/>Butterscotch Pudding</p> <p>•</p> <p>Cream of Chicken Soup<br/>Cold Meat<br/>Au Gratin Potatoes<br/>Combination Salad<br/>Burnt Sugar Cake</p>  | <p><b>9</b><br/>Tomato Juice<br/>Fried Mush, Sirup</p> <p>•</p> <p>Cream of Pea Soup<br/>Baked Halibut<br/>Mashed Potatoes<br/>Harvard Beets<br/>Carrot Sticks<br/>Suet Pudding,<br/>Caramel Sauce</p> <p>•</p> <p>Cream of Mushroom Soup<br/>Tuna Salad<br/>French Fried Potatoes<br/>Olives<br/>Chocolate Sundae</p>   | <p><b>10</b><br/>Stewed Prunes<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Vegetable Soup<br/>Grilled Sausage<br/>Baked Potatoes<br/>Buttered Turnips<br/>Tapioca Cream,<br/>Apricot Sauce</p> <p>•</p> <p>English Beef<br/>Soup<br/>Creamed Dried Beef<br/>on Toast<br/>Peach and Cottage<br/>Cheese Salad<br/>Royal Anne Cherries<br/>Angel Food Cake</p> | <p><b>11</b><br/>Oranges<br/>Bacon and Eggs<br/>Sweet Rolls</p> <p>•</p> <p>Tomato Juice<br/>Roast Chicken,<br/>Pecan Dressing<br/>Mashed Potatoes<br/>Green Peas<br/>Celery and Olives<br/>Fruit Sundae</p> <p>•</p> <p>Cold Ham<br/>Au Gratin Potatoes<br/>Tomato Salad<br/>Chocolate Cake</p>  | <p><b>12</b><br/>Grapefruit Juice<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Rice Consommé<br/>Meat Loaf,<br/>Mushroom Gravy<br/>Mashed Potatoes<br/>Green Beans<br/>Cold Canned Tomatoes<br/>Vanilla Pudding</p> <p>•</p> <p>Julienne Soup<br/>Chicken Croquettes<br/>Creamed Peas<br/>Iceberg Salad<br/>Fruit Gelatin<br/>Wafers</p> |
| <p><b>13</b><br/>Fruit Juice<br/>Griddle Cakes, Sirup</p> <p>•</p> <p>Corn Chowder<br/>Boiled Beef With Gravy<br/>Steamed Dumplings<br/>Baked Squash<br/>Pineapple Upside-Down<br/>Cake</p> <p>•</p> <p>Vegetable Soup<br/>Ham Salad Sandwiches<br/>Health Salad<br/>Fruit Cup<br/>Orange Bread</p>                               | <p><b>14</b><br/>Orange and Grapefruit<br/>Segments<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Cream of Vegetable<br/>Soup<br/>Baked Stuffed Heart<br/>Mashed Potatoes<br/>Succotash<br/>Pumpkin Pie</p> <p>•</p> <p>Cranberry Juice<br/>Scrambled Eggs With<br/>Chicken Giblets<br/>Stuffed Baked Potatoes<br/>Raspberry Gelatin<br/>Heart Cookies</p> | <p><b>15</b><br/>Bananas<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Tomato Consommé<br/>Liver and Bacon<br/>Mashed Potatoes<br/>Creamed Onions<br/>Brown Betty</p> <p>•</p> <p>Cream of Celery Soup<br/>Meat Croquettes,<br/>Spanish Sauce<br/>Fruit Salad<br/>Hot Sweet Rolls<br/>Strawberry Jam</p>  | <p><b>16</b><br/>Stewed Prunes<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Cream of Mushroom<br/>Soup<br/>Fried Ocean Perch<br/>Escalloped Potatoes<br/>Buttered Spinach<br/>Celery and Olives<br/>Baked Lemon Pudding</p> <p>•</p> <p>Celery Consommé<br/>Tuna and Noodle<br/>Casserole<br/>Tomato and Cucumber<br/>Salad<br/>Buttermilk Cake</p>          | <p><b>17</b><br/>Baked Apples<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Noodle Soup<br/>Stuffed Frankfurters<br/>Mashed Potatoes<br/>Buttered Parsnips<br/>Gingerbread, Fluffy<br/>Orange Sauce</p> <p>•</p> <p>Tomato Juice<br/>Meat Pie<br/>Combination Salad,<br/>Thousand Island Dressing<br/>Grapenut Custard</p>       | <p><b>18</b><br/>Grapes<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Jellied Consommé<br/>Swiss Steak<br/>Mashed Potatoes<br/>Buttered Cauliflower<br/>Celery and Spiced<br/>Peaches<br/>Butterscotch Sundae</p> <p>•</p> <p>Chicken à la King<br/>Potato Chips<br/>Perfection Salad<br/>Banana Cake</p>                                 |
| <p><b>19</b><br/>Grapefruit Juice<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Scotch Broth<br/>Hamburgers<br/>Sliced Onions<br/>Mashed Potatoes<br/>Carrots and Peas<br/>Banana Custard</p> <p>•</p> <p>Vegetable Soup<br/>Baked Stuffed Potatoes<br/>Egg and Kidney Bean<br/>Salad<br/>Applesauce<br/>Gingerbread</p>   | <p><b>20</b><br/>Kadota Figs<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Tomato Bouillon<br/>Beef Pot Roast<br/>Boiled Potatoes<br/>Green Beans<br/>Coleslaw<br/>Ice Cream</p> <p>•</p> <p>Vegetable Soup<br/>Cold Meat<br/>Creamed Potatoes<br/>Pineapple Upside-<br/>Down Cake</p>   | <p><b>21</b><br/>Oranges<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Vegetable Broth<br/>Veal Cutlets Creole<br/>Boiled Potatoes<br/>Rutabagas<br/>Celery<br/>Creamy Rice Pudding</p> <p>•</p> <p>Cream of Pea Soup<br/>Deviled Eggs<br/>Tomato Aspic Salad<br/>Olives<br/>Baked Potatoes<br/>Pears and Wafers</p>                                      | <p><b>22</b><br/>Cranberry Juice<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Consommé Julienne<br/>Stuffed Pork Chops<br/>Browned Potatoes<br/>Creamed Peas and Celery<br/>Relish<br/>Cherry Pie</p> <p>•</p> <p>Cream of Spinach Soup<br/>Baked Beans<br/>Corn Bread<br/>Asparagus Salad<br/>George Washington Cake</p>                                    | <p><b>23</b><br/>Italian Plums<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Cream of Potato Soup<br/>Macaroni and Cheese<br/>Buttered Beets<br/>Spinach With Sliced Eggs<br/>Apple Pie</p> <p>•</p> <p>Cream of Corn Soup<br/>Salmon Croquettes<br/>Creamed Peas<br/>Lettuce Salad<br/>Fruit Gelatin</p>                        | <p><b>24</b><br/>Applesauce<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Vegetable Soup<br/>Meat Loaf<br/>Hashed Brown Potatoes<br/>Hubbard Squash<br/>Hot Slaw<br/>Appleberg</p> <p>•</p> <p>Bouillon<br/>Baked Sausage<br/>Escalloped Potatoes<br/>Carrot Salad<br/>Royal Anne Cherries<br/>Peanut Butter Cookies</p>                  |
| <p><b>25</b><br/>Grapefruit<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Tomato Juice<br/>Fricassee of Chicken<br/>Boiled Rice<br/>Whole Kernel Corn<br/>Spiced Crabapples<br/>Fresh Fruit Sundae</p> <p>•</p> <p>Cold Ham<br/>Potato Salad<br/>Celery and Olives<br/>Orange Cake</p>                                     | <p><b>26</b><br/>Stewed Prunes<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Consommé<br/>Beef Stew With<br/>Vegetables<br/>Hot Biscuits<br/>Cold Tomatoes<br/>Apple Batter Pudding</p> <p>•</p> <p>Cream of Mushroom Soup<br/>Scrambled Eggs With<br/>Minced Ham<br/>Buttered Noodles<br/>Cabbage Salad<br/>Blueberry Pie</p>                             | <p><b>27</b><br/>Apple Juice<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Cream of Carrot Soup<br/>Liver and Bacon<br/>Mashed Potatoes<br/>Buttered Beets<br/>Homemade Chili Sauce<br/>Cranberry Rebecca<br/>Pudding</p> <p>•</p> <p>Fruit Cup<br/>Meat Pie<br/>String Beans<br/>Spring Salad<br/>Chocolate Éclairs</p>                                  | <p><b>28</b><br/>Oranges<br/>Bacon and Eggs<br/>Toast and Jam</p> <p>•</p> <p>Consommé Julienne<br/>Pork Chops<br/>Franconia Potatoes<br/>Stewed Tomatoes and Okra<br/>Butterscotch Pie</p> <p>•</p> <p>Chicken and Rice Casserole<br/>Buttered Peas<br/>Iceberg Salad<br/>Apricots<br/>Angel Food Cake</p>  |   |  |

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But the wheat germ in Ralston  
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Instant Ralston and  
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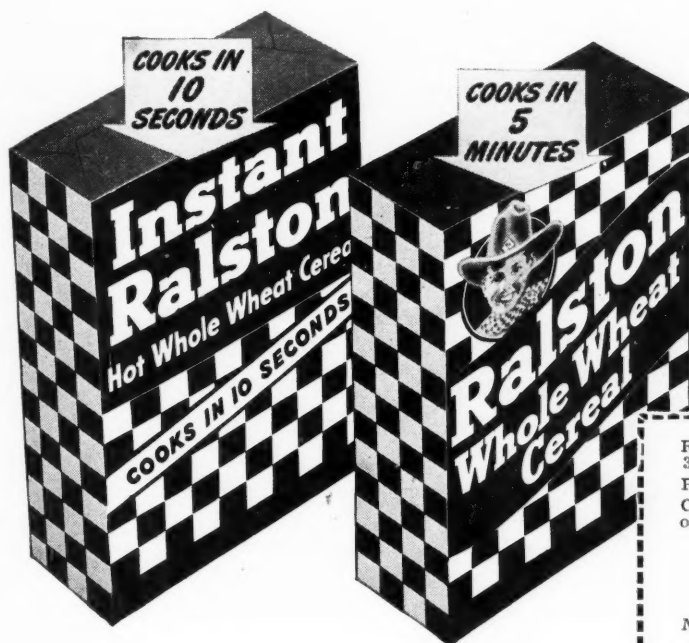
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## Work Orders and Power Plant Log

# Speed Up SERVICE Cut Down on COSTS

THE work order used by the engineering department at Children's Hospital, Denver, is a brief form I put into operation about three years ago, principally as a means of speeding up repair service; however, it also has proved of value in maintaining and checking repairs and cost records in the various departments served.

When repair service of any type is necessary the department head or supervisor of the floor or station must first enter a request on this form after which it is sent to the director or superintendent for approval. On being approved, the forms are placed on file and picked up twice daily, at 9 a.m. and again at 1 p.m., and delivered to my office after which the proper mechanic is designated and assigned to each job. The job is then routed in order of its precedence over others.

**G. STANLEY TUCKER**

Engineer, Children's Hospital, Denver

We endeavor to maintain scheduled repair service twice weekly in all departments. For example, Monday and Thursday we accommodate service calls in all departments in the hospital proper, and on Tuesday and Friday we pick up the dietary and laundry departments' and the nurses' home service calls; then on Wednesday and Saturday we attend to the calls from the isolation hospital. All our mechanics have been instructed that when attending calls in the isolation building they must observe the same isolation technic as is followed by the other daily workers in this unit.

We have found that by routing repair and service calls in the manner

described, considerable time is saved our mechanics which they formerly wasted galloping around from one building to another and often doubling back to the same location within the hour.

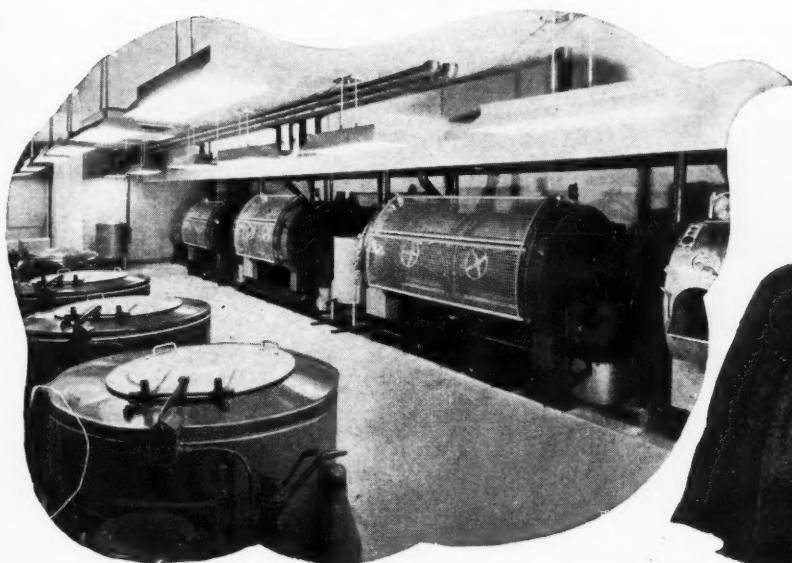
Of course, the cooperation of all concerned is necessary for the success of such a plan as this and we are fortunate in having such cooperation.

In the event of an urgent or emergency call, such as an interruption of the utility services or anything not included in the general instructions covering the use of the form, my office is notified by telephone. We have a call board in our shop on which each mechanic enters the

Form 26 M		REQUEST FOR REPAIRS - WORK ORDER	
DEPARTMENT	<i>Surgery</i>	REQUEST OK'd by	<i>Mr. M. J. Sullivan</i>
DATE	<i>October 18, 1944</i>	DATE JOB FINISHED	<i>10-18-44</i>
REQUESTED BY	<i>M. Kennedy</i>	MECHANIC	<i>Tom Bortoloff</i>
DESCRIPTION OF REQUEST: <i>Steam escaping around autoclave door. (available after 11:00 am - 4 p.m.)</i>			
UNITS	DESCRIPTION OF MATERIALS USED	UNIT COST	TOTAL COST
1	<i>16 in. Auto Clave Gasket</i>	<i>1.75</i>	<i>1.75</i>
<i>1/2</i>	<i>hr labor</i>	<i>1.50</i>	<i>75</i>
ALL REQUESTS FOR SERVICE OR REPAIRS MUST BE ENTERED ON THIS FORM			

# WHY DREAM

ABOUT YOUR MODERN POST-WAR LAUNDRY



# ACT NOW

TO MAKE YOUR DREAM COME TRUE



Now is the time to plan the modernization of your post-war hospital laundry. Then you'll be ready to act, when all the machinery required is again available. Experienced engineers are available now.

—to survey your laundry requirements, to help you plan your linen control systems, and to submit new floor layout plans with complete equipment and recommendations.



## U.S. HOFFMAN

MACHINERY  
CORPORATION  
107 Fourth Ave., New York 3, N.Y.

COMPLETE LAUNDRY EQUIPMENT SERVICE FOR THE INSTITUTION



location of the job on which he is currently working. In the event of an emergency we notify the man who is needed for the particular job so that he can attend to the matter promptly.

After completing each job, the mechanic lists on the form the material used and his time. At the end of the month all completed job tickets are turned over to the bookkeeping department. The material used is then charged off our inventory and to the department for which the repair job was performed. After the bookkeeping department has finished with the form it serves as a check on maintenance cost and frequency of service calls in the various departments over a given period.

Should a discussion arise concerning the mechanic attending the call we have instructed each one to use the reverse side to record particulars in regard to the job. Sometimes it develops that some incident will prevent him from attending the call, thus causing it to be rerouted and postponed. A record of this fact is helpful if any question arises.

After making the scheduled repair rounds on service calls, we have four or five hours daily for our routine shop jobs, *i.e.* equipment repair in general, welding and pipe work.

In addition to our operating engineers, our maintenance crew is made up of a maintenance engineer, who is also licensed, his helper, an electrician, two painters and a car-

penter. We are a little undermanned at present. Lately we have tried rotating our shift engineers on assisting with the maintenance work and we find that this gives us greater flexibility in the use of our manpower. In other words, each man is acquainted with the duties of the other and, should occasion arise, a rearrangement could be effected without interrupting the service expected of us.

Another record that has proved its value is the power plant log. I started this at about the same time as the work order forms as they are correlated to some extent. From this log we can determine for any shift or for any other period the performance, efficiency and operating costs in the power plant. We maintain a daily check on the boiler water, feedwater and makeup and returns, giving us controlled boiler treatment and blowdown.

Each shift engineer after taking over and observing preliminaries checks the steam flow, makeup water, power and other main meter readings of the man he has just relieved and enters the difference for his shift on the log in the space provided. The engineer on the day shift totals the amounts for all shifts and makes the proper entry.

This procedure has produced some competition among the operators in trying to obtain the best results. Each is interested in what the record of his shift shows, as checked by the man following him.

In the space provided for routine house and plant inspection, the engineer on watch checks twice on his shift, at the time designated, the motors, machines and other items mentioned and makes note under "remarks" of any condition that requires attention and that would take more than ten or fifteen minutes of his time to correct.

We have found that this log works out well in our plant, giving us daily and seasonal reference data that would be difficult to obtain otherwise. For instance, we are now paying \$2.05 more per ton for fuel than we were in 1941 but our evaporation costs have increased only 17 per cent. In analyzing the figures from our log we have been able to determine where to effect certain changes and refinements in order to achieve better operating methods that result in quite a saving in fuel consumption.

## For Better Fabrics

**HEYWOOD M. WILEY**

Girard College, Philadelphia  
Educational Director, N.A.I.L.M.

**T**WO comparatively recent developments in the laundry industry are of particular interest to hospital laundry managers. They are: (1) a lasting positive germicidal control for linens, covering more than the average period between launderings; (2) fabric conditioning with an emulsion coating, the amount of coating being determined by the use to which the fabric will be put.

The germicidal control arose out of the Army's demands for a method of treating clothing that would render it germ-free for a long period of time and under extraordinary conditions. This type of control is particularly necessary to prevent infection from fragments of clothing imbedded in wounds.

Research workers have developed several products that serve this purpose very satisfactorily. So far as is known all of the germicides used have proved to be nontoxic and no cases of rash have developed when they were used.

Fabric conditioning entails coating the fibers with a wax emulsion that is subsequently dried either by ironing or with heat to remove all moisture, thus making them water-repellent. In addition to being water-repellent, the fabric is left porous and able to breathe.

Water-bearing soil and stains do not penetrate the fabric thus treated. They either fall off the garment or can be brushed from the surface. Most foods, medicines, inks and innumerable substances that normally stain on contact with fabrics are absorbed by the emulsion. In the event that there is an excessive amount of staining substance, beyond the capacity of the emulsion to absorb it, the fabric receives only a secondary part of the substance.

The emulsion is soluble in a soap solution; washing usually removes all traces of it and, with it, the absorbed stains and any residual secondary stains on the fabric. Washing can be done at lower temperatures and in less time because of the elimination of the higher penetration of soil.

Preliminary tests made on linens treated by the emulsion established the fact that the life of the fabric was doubled. They also showed that the emulsion acts as a lubricant and reduces the amount of damage done by abrasive action resulting from rubbing and friction on such areas of clothing as cuffs, elbows and collars. Further tests are now being run to confirm these findings.

Both the germicidal control and the fabric conditioning emulsion can be applied in the laundry.

# NEED SPEED ?

for your maintenance painting jobs●



...then you need

## Kem-Tone

MIRACLE WALL FINISH

**1 DRIES IN ONE HOUR OR LESS**—No long wait for paint to dry. Rooms can be put right back in order.

**2 ECONOMY**—A concentrated paste paint. 1 gallon mixed with water makes up to 1½ gallons of paint. Kem-Tone's cost, speedy application and economical upkeep save money on all counts.

**3 COVERS MOST SURFACES WITH ONE COAT** (Painted walls—plywood walls—wallboard—brick interiors—concrete block—building tile—wallpaper, etc.)

**4 NO PUNGENT, LINGERING ODOR** of paint thinners and solvents—rooms may be used same day painted.

**5 NO SIZING, NO PRIMING**—Eliminates priming coat on practically every surface. Cuts time and labor costs!

**6 DRIES TO A FLAT MATTE FINISH** (a) Obliterates unsightly appearance of rough and uneven wall surfaces. (b) Perfect light diffusion, without glare.

**7 JOBS FINISHED QUICKLY**—Goes on fast and easy. Covers more surface quicker and easier.

**8 QUICK, CONVENIENT CLEAN-UP TIME** (a) Splatters quickly removed with damp cloth. (b) Brushes cleaned with soap and water.

**9 PERMANENT FINISH**—A synthetic resin and oil paint which assures adequate bond and adhesion on all types of wall surfaces. Won't rub or wash off.

**10 EASY CLEANING**—Kem-Tone can be cleaned with wallpaper cleaners or washed with ordinary wall cleaners.

**11 COLORS WITH EYE APPEAL!** Kem-Tone colors make any room more inviting, attractive!

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The Sherwin-Williams Co.  
Cleveland, Ohio

**THE MIRACLE MAINTENANCE FINISH  
FOR WALLS AND CEILINGS**





# HOUSEKEEPING

Conducted by Alta M. La Belle

## An Administrator's Angle On Housekeeping

### Part II

NELLIE GORGAS

Administrator, St. Barnabas Hospital, Minneapolis

IT IS important for both administrator and executive housekeeper to realize just where the province of each begins and ends. The following division seems to be quite satisfactory and is the one most generally in use, although circumstances may require something quite different in some cases. Whatever the division is, it should be clearly understood by all those concerned.

First, let us consider the matter of *personnel*. The administrator sets up standards as to how many people should be employed and what, in general, should be their responsibilities. This is always done most satisfactorily in conjunction with the executive housekeeper.

#### Make the Plan First

In opening any new unit or making any change in the procedures or plans of operations, a conference between the housekeeper and the superintendent will result in a workable plan. The standard will be decided upon and then it is the executive housekeeper's responsibility to find the correct number of qualified people.

There is no easy rule to follow as to what type and how many workers there shall be in any one hospital. Some housekeeping departmental staffs include painters, plasterers, linen room staff and laundry workers because in these institutions the housekeeper is responsible for maintenance and linen and laundry. This seems logical except when the laundry requires 10 or more workers and an experienced laundryman who

will work far more efficiently if given his own departmental responsibility.

The salary schedule for each classification of worker is the responsibility of the administrator but, again, the department head should be consulted and kept well informed of the reasons for changes and additions as they are made. The other working conditions, such as sick leaves, vacations, hours and holidays, are also the responsibility of the central authority, but the department head should be kept informed and asked for suggestions as changes are considered.

The executive housekeeper is responsible, then, for maintaining her staff on the basis of these rules set by the administrator.

Second, as to *materials*. Usually, the purchasing agent is responsible for buying materials, if there is one; the purchasing agent and the administrator may be one and the same. Or in some cases, when the executive housekeeper has had an opportunity to prove herself, she is allowed to do her own purchasing, within certain limitations.

Regardless of who actually does the purchasing, the specifications are all-important and the housekeeper should be sure that she gives them accurately and far enough in advance so that her needs will always be met. Her experience and knowledge in a specialized field are important. She can almost always be counted on to be much better informed about qualities of linens, cleaning materials and color schemes

than is the administrator. Surely, she should always be in position to know the exact status of her stock on hand and how soon she needs replacements.

Third, *procedures*. The administration sees to it that the proper procedures are in operation. Within her own department, the housekeeper knows how to set up procedures, that is, rules of action that make for frictionless activities. No one of us in any organization can work as an individual. Whatever he does is bound to affect others. How widespread these reactions are is often amazing. For this reason, interdepartmental procedures must be carefully worked over, and the wise administrator will conduct conferences and help to crystallize the thinking of the people concerned and to work out correct procedures.

In summary, then, the administrator is responsible for seeing that the proper plan or pattern is devised and that it is workable, that those affected know about it and that they realize that he is, from that point on, leaving the executive housekeeper to carry on the job.

He makes himself available to assist her if unforeseen complications appear or if she cannot carry out the plan agreed upon, but except for these contingencies, the housekeeper is in sole charge and is completely responsible for carrying on and achieving the objective.

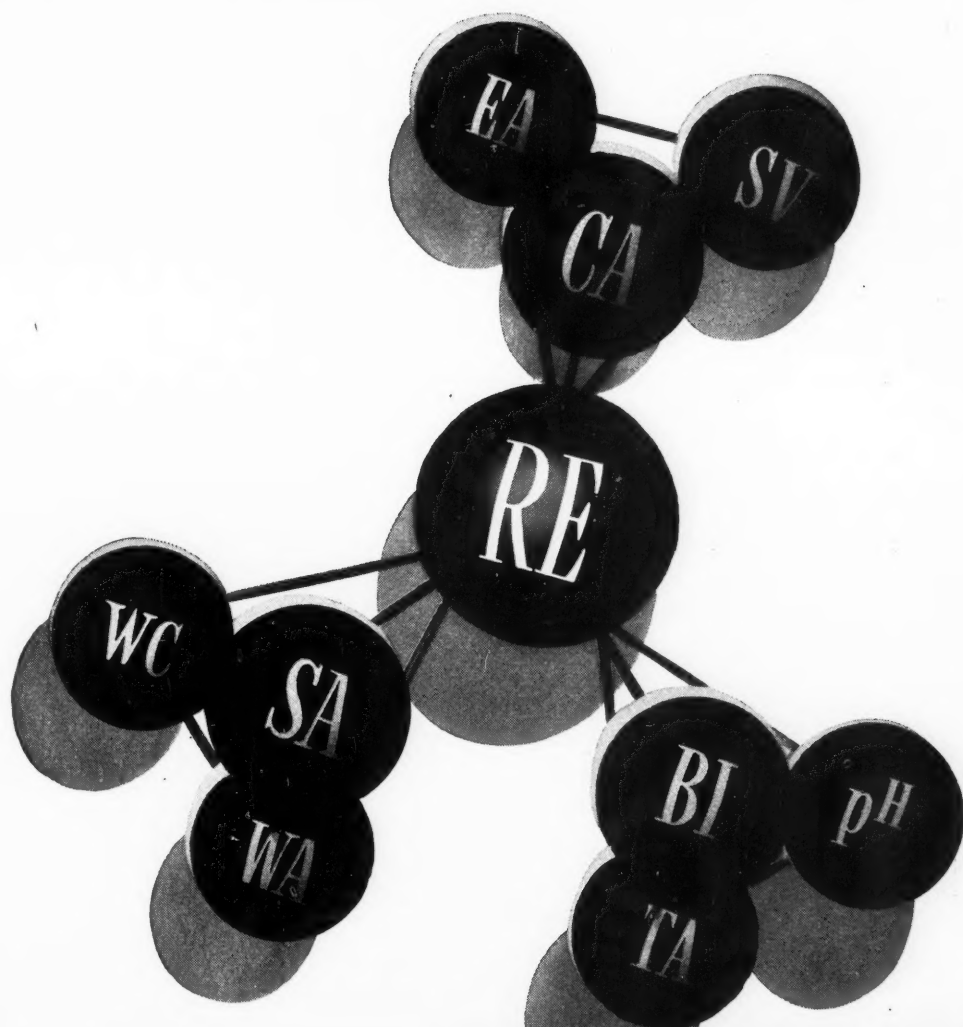
#### But the Picture Has Changed

Now let us look quickly at what has happened to this administrative picture recently. Ordinarily, as far as the administrator is concerned, once the plan has been put into action, he can forget about it, confident that the housekeeper will keep the work going smoothly or will inform him of difficulties. Only if he adds a new nursing unit or changes his physical or organizational setup, does he need to concentrate on the problem for long again.

However, these are not ordinary times and things are changing. Personnel has been most affected. All too frequently, plans have to be changed. Patterns must be cut according to the goods one has available. The goods are skimpy now and they are substandard. So patterns must be changed frequently.

The pattern, one recalls, is the responsibility of the administrator and





## THIS IS WHAT HAPPENS WHEN YOU WASH A DISH

Washing a dish is no simple operation. These elements must go into action...

Wetting Action (WA) must lower surface and interfacial tensions and allow the cleaning solution to penetrate to surface of the base. Emulsifying Action (EA) must disperse grease and oil in tiny globules, and by suspension prevent redeposition. Saponifying Value (SV) must convert organic fats and oils into soluble soaps, and Solvent Action (SA) put soils into solution. Colloidal Activity (CA) must disperse solid soils into minute particles which may then be easily removed. Water Conditioning (WC) softens or controls the elements which cause water hardness.

Correct Buffer Index (BI) assures ability to absorb either alkaline or acid soil, thus prolonging life of the solution. Proper pH assures the correct measure of energy of alkalinity and Total Alkalinity (TA) must supply maximum active cleaning energy.

In formulating a cleaning compound, therefore, it is obvious that no one factor is the only key to all problems. The answer is in determining the relative value of all these factors as they apply to your problem.

Putting these factors into correct balance is a responsibility you can entrust to Turco's staff—a responsibility for which their two decades of Research and Experience (RE) have well qualified them. Take your problem to Turco.

For a fuller explanation of these vital factors, write for Turco's Booklet on your own letterhead.



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so the housekeeping comes to his attention more frequently. It is important to recognize that the pattern can and must be changed. It cannot be allowed to fail because of lack of personnel. The housekeeper must be alert to changes and limitations and the more efficient the housekeeper, the better will she be prepared to offer solutions to her administrator.

After all, the housekeeper naturally knows the field much more thoroughly than the administrator and she knows her personnel and facili-

ties more intimately and may justifiably be held accountable for having some plan ready to offer to prevent a threatened breakdown. Both the administrator and the housekeeper must be constantly ready now to meet the challenge before them of covering emergencies and doing the impossible. The correct answer, however, is not for the executive to do the job herself, except in serious emergencies and for brief periods. She can spend her time organizing the work so that the depleted staff can do the really important tasks.

*Material* is in an unusual state now, too. Purchasing is difficult. Goods are often either unattainable, temporarily or permanently, or can be had only with a priority. Priority regulations change rapidly, and too much time has to be spent in keeping abreast of the latest rulings. Deliveries are slow. Conservation is all-important, but with the labor supply as difficult as it is, it is almost impossible to safeguard our property as well as formerly.

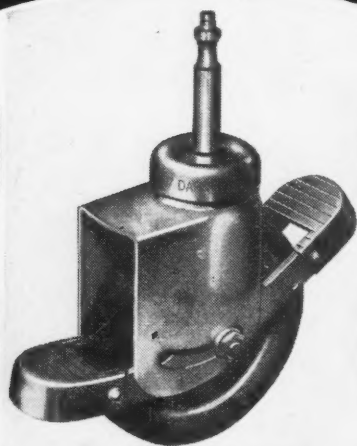
An extra burden is placed on both the administrator and his representative, the executive housekeeper, to try to plan intelligently just how to safeguard the welfare of the patient by being sure that enough sheets, pillow cases and other linens are on hand, that the needed soap and cleaning supplies are available and that all possible changes in layout and equipment are made that will conserve all the available manpower for work which can neither be eliminated, wholly or partially, nor be done by mechanical devices.

*Procedures* must be analyzed and revised to conform to the current situation. All of us realize that certain once justifiable procedures are still being followed in our hospitals long after they have outgrown their usefulness.

Departmental interrelationships are having to be changed because today no department is functioning exactly as before. Each hinges on the other. So when one changes, attention must be given to the others involved. Hence, the administrator must call conferences more frequently and again help alter procedures so that they become workable with the rearranged and organized departments.

All of this discussion has been intended only to point out that from the administrative angle the problem of housekeeping has become more complex for both the administrator and the executive housekeeper.

The housekeeper feels the impact first. Her administrator counts on her to react quickly and to report to him when the plan is failing and to offer suggestions to correct the difficulty. He, from experience with other department heads and outside contacts, must be prepared to move quickly, to see the merits and disadvantages in the changes suggested and to see wherein lies an opportunity for avoiding difficulties. The



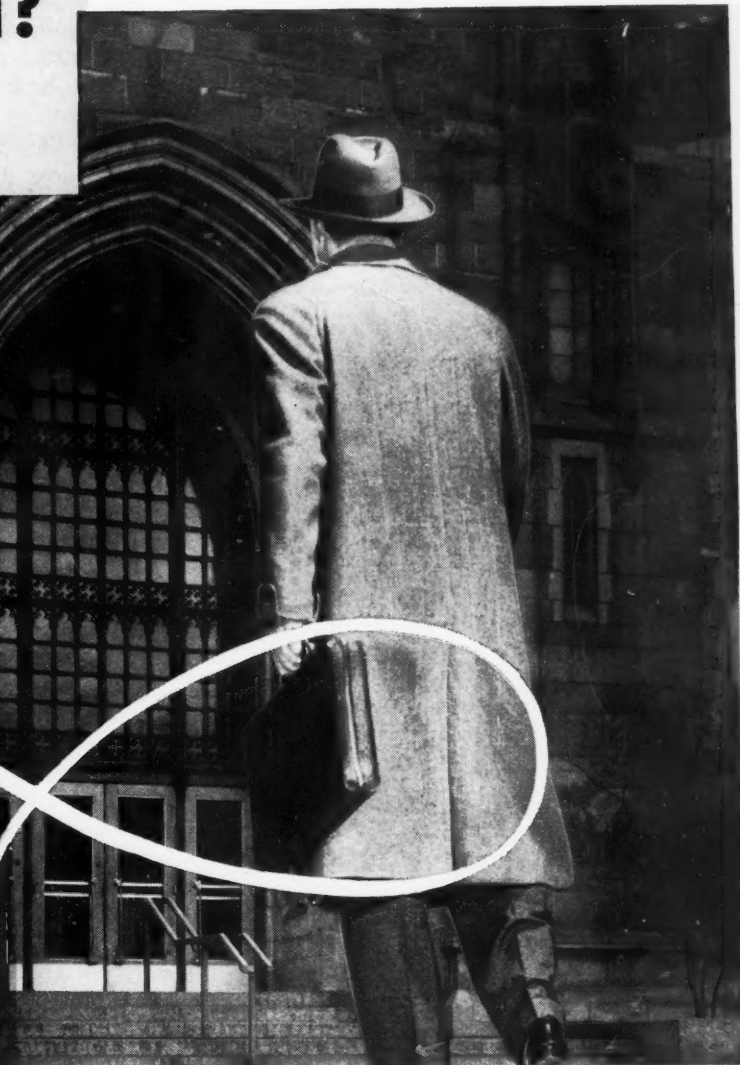
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administrator must make the final decision.

Neither the administrator nor the housekeeper must be a defeatist and sit back, saying, "It cannot be done." There is some kind of a workable solution that can be arrived at by changing the equation, by substituting one type of worker for another, by using mechanical devices or by changing procedures and organization plans.

As a last resort, of course, we can change our objectives and reduce our standards. But there is always an

answer and one that will allow us to carry out our community responsibility for the care of the sick.

Both the administrator and the housekeeper must take a vow to keep themselves healthy and strong so as to be ready for quick action and prompt intelligent decisions. Both must realize that they are essential to the plan and that the plan is essential to the community.

Ingenuity, adaptability and broad-mindedness will have to be exercised for we are definitely still in midchannel with a long distance yet

to pull. If we concentrate on watching intently the three factors mentioned, personnel, facilities and procedures, and adjusting them as breaks in the plan are threatened, and if we hold our objectives clearly in mind, the problems will dissolve eventually and we shall be proud and thankful that we had the opportunity of doing our part in this crisis; that we were responsible for providing sanitary, healthful, safe institutions where medical care could be given as it should be by a relatively small group of physicians trying valiantly to handle a job that seems at times almost too big for them, while their colleagues are meeting even worse difficulties with the armed services abroad.

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### Mr. Administrator— What's in a Name?

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This question is addressed to administrators, especially to those who so frequently ask us, their executive housekeepers, why we do not change our title. They say that we have outgrown it. We agree with them because we, too, feel that we should have a more suitable title.

The word "housekeeper" implies the individual homemaker, not the business-like department head who must be proficient in so many things.

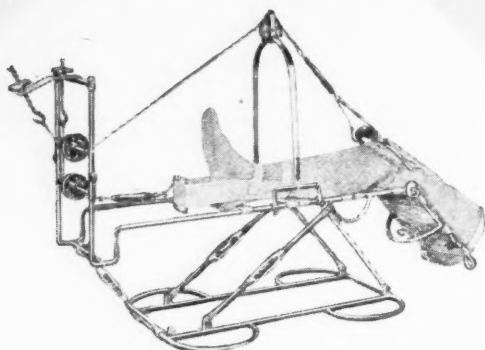
There are many efficient institutional housekeepers, but unfortunately, many of them do not have the educational background or social poise that the administrator feels he has a right to expect in his department heads. Women of high caliber will often turn away from this type of position because the title of housekeeper offends their sense of dignity. We all know that a dignified title adds to the attractiveness of a position, whereas a title that is injurious to our pride will detract from all of the position's other advantages.

The administrator who considers his housekeeper a full-fledged department head and who derives satisfaction and pride in having a woman of both proficiency and culture as head of this important department will think seriously of changing her title.

Webster offers a name—"oikologist," which he describes as "one who practices the science of housekeeping." This does seem to be overdoing it a bit but surely a simpler title with the necessary dignity could be found. How about helping us to find it?—ALTA M. LA BELLE.

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## NEWS IN REVIEW

### A.M.A. Urges Establishment of Federal Department of Health

By EVA ADAMS CROSS

WASHINGTON, D. C.—Establishment of a federal department of health coordinating all medical and health functions was again advocated at a meeting held here December 4 to 6 by the Council on Medical Service and Public Relations of the American Medical Association. Under the proposed agency would be gathered all federal departments and bureaus dealing with the various problems of health, except the Army and Navy, with a medical officer holding cabinet status as director.

For the past year and a half the council has been studying various suggested modifications of the distribution of medical care. The study has covered voluntary nonprofit, industrial and commercial plans for reducing the cost of medical care. A platform adopted by the A.M.A. House of Delegates provides a basis for more widespread distribution of medical care which will also solve the financial problems of illness confronting many people, the council believes.

The medical profession has accepted the principle of insurance as one which will be of great assistance but it feels that this insurance must be on a voluntary basis to avoid political interference and to ensure medical care of high qual-

ity instead of mere quantity, declared Dr. Louis H. Bauer, a trustee of the A.M.A.

A summary of the A.M.A. plan, as Doctor Bauer gave it, is:

1. Continued expansion of the practice of medicine with full development of approved voluntary hospital, medical indemnity, industrial and commercial insurance against the costs of medical care.
2. Development of public health facilities for preventive medicine all over the country.
3. Development of adequate diagnostic facilities everywhere.
4. The use of the voluntary insurance principle in caring for the indigent and medically indigent.
5. The development of hospital facilities where present facilities are used to the utmost and are still inadequate.
6. The use of federal funds to aid communities in public health measures, care of the indigent and construction of necessary hospitals, when local communities are unable to finance the projects, but with retention of local administration.
7. The creation of a unified federal Department of Health.

### Baruch Committee Grants \$185,000 to Seven Schools

Grants totaling \$185,000 were made by the administrative board of the Baruch Committee on Physical Medicine to seven research institutions in the United States at a meeting in New York on November 22.

These grants included \$50,000 to Massachusetts Institute of Technology, and the following amounts to medical schools: \$40,000, University of Minnesota; \$30,000, Harvard University; \$30,000, University of Southern California; \$15,000, University of Illinois; \$15,000, University of Iowa, and \$5000, Marquette University.

The gift to M.I.T. is in support of a five year program of training and research in electronics, instrumentation and physics in relation to medicine.

The grant of \$40,000 to the University of Minnesota is to support the development of a three year teaching and fellowship program in physical medicine.

### New York Increases Benefits

Twenty-one days of hospital care for each illness instead of 21 days for an entire year are now offered to the 1,700,000 members of the Associated Hospital Service of New York, according to an announcement by Louis H. Pink, president, on December 1. In addition, half benefits are offered for ninety additional days after each twenty-one day period of hospital service. Furthermore, a cash allowance of \$7.25 is paid to subscribers who may need operating room service but do not become bed patients.

### A.C.S. Lists Approved Hospitals

A total of 3911 hospitals was surveyed during 1944 by the American College of Surgeons and 3152, or 80.6 per cent, were approved, according to an announcement on December 31. Of the 2342 hospitals of 100 beds and more, 93.1 were approved. Of those of 50 to 99 beds, 70.3 per cent were approved. Only 450 hospitals of 25 to 49 beds were surveyed and only 40.2 per cent were approved.

### Study Advisability of Dental Care Plan

One or more experimental dental service prepayment plans are to be inaugurated under the direction of local dental societies to gain factual information about the feasibility of such plans in the United States at the present time, according to a report submitted by the Council on Dental Health to the American Dental Association.

It is suggested that this experimental plan be tried in a city of at least a hundred thousand population for twelve months with an enrollment of not over 5000 persons representing a cross-section of employed groups enrolled under procedures similar to Blue Cross.

The Council on Dental Health has prepared various legal forms to assist in the inauguration of such experiments. The council declares that the success of prepayment medical and hospital plans and public awakening to the value of dental health have aroused widespread interest in budgeting for dentistry.

### Eugene Meyer Heads Mental Hygiene Committee

The first layman to be chosen president of the National Committee for Mental Hygiene since it was founded by the late Clifford W. Beers is Eugene Meyer, editor and publisher of the *Washington Post*. Mr. Meyer was elected president at a meeting of the board of directors held in New York December 14. He will also serve as chairman of the board to succeed Orlando B. Willcox.

In addition to Mr. Meyer, Lt. Col. Karl Menninger and Dr. Lawrence Kubie were elected directors at the meeting.

At the sixteenth annual meeting of the American Foundation for Mental Hygiene also held in New York December 14, G. Howland Shaw, recently retired assistant secretary of state, was elected president of the foundation.

### Seek More Male Nurses

A growing need for more well-prepared male nurses has caused the National Nursing Council for War Service to write state and local councils urging action to recruit men for approved schools that offer training facilities. Selective Service and better paying war jobs have reduced the enrollment of male student nurses from 725 in 1939 to 375 in 1943 and even fewer this year. Male nurses trained in psychiatric and genito-urinary nursing are needed, particularly in veterans' hospitals. Male nurses are eligible for membership in the U. S. Cadet Nurse Corps if they are not subject to military service.



# When Pruritus Ani is an Added Burden

Complications or unforeseen exacerbations of pre-existing affections can make the lot of the hospital patient extremely unhappy. Should pruritus ani develop when hospitalization is for an unrelated ailment, the discomfort of the patient may mount to an unbearable degree.

In such emergencies, Calmitol is the indicated therapeutic agent. Its specific antipruritic properties stop anal itching quickly and for prolonged periods. Applied directly into the anorectal area, Calmitol provides welcome relief, and prevents the emotional tension which unrelenting itching brings in its wake. Calmitol is dependably effective in all types of pruritus ani, as well as pruritus scroti and vulvae.

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## Hospital Commission Outlines Program

The National Commission on Hospital Care meeting in New York City on December 8 under the chairmanship of Thomas Gates approved the scope of study that is to be undertaken, a series of objectives for state studies and a sample questionnaire to obtain necessary information; authorized a public educational program; authorized the preparation of hospital standards to be applied by local groups, and voted to give some financial assistance to the state study in Michigan.

The scope of study suggested by the

staff and approved by the commission includes census and study of the distribution of facilities, summary of the legal basis for operation of hospitals, material on historical development of hospitals, analysis of relationships of hospital and governmental and voluntary agencies, review of trends in hospital service, analysis of educational and research facilities, review of finances and recommendations regarding desirable criteria for facilities, organization and management. The commission especially emphasized that consideration should be given to preventive medicine in any future health program and to the place of veterans' hospitals in national health.

A state study has been completed in Maryland. State groups to study hospitals have been organized in Alabama, Maine, Michigan, Missouri, Nebraska, New York, North Carolina, North Dakota, South Carolina and Utah.

Organizing committees have been appointed in California, Kansas, Massachusetts, Oklahoma, Texas and Wisconsin. Interest has been expressed in Connecticut, Georgia, Iowa, Mississippi, New Jersey, Oregon and Virginia.

The national commission is ready to assist state study groups with technical consultants to advise concerning the general program of study. It will provide an outline of a suggested study, various work materials (including survey schedules for hospitals and public health departments) and summary reports on federal hospital services and will offer tabulations of population and economic statistics.



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Aloe cotton elastic bandages are woven of long staple cotton and "VINYON E"—a vinyl resin yarn—which has been found to produce a superior type of elastic bandage because of its natural elasticity. These improved elastic bandages will provide even, uniform, easily controlled and steadily maintained pressure in all conditions where an elastic bandage is indicated. High quality feather-edge prevents binding. Special weave permits free movement, ventilation and circulation. Unlike most other elastic bandages, Aloe cotton elastic bandages with "VINYON E" do not have to be washed daily in order to retain their elasticity. Washing need only be done when bandage becomes soiled. Each size bandage listed below measures approximately 5½ yards when stretched and is furnished with two metal clips in cellophane wrapped and sealed package.

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HH5934—Aloe Cotton Elastic Bandage with "VINYON E," 2-inch width.....	\$0.63	\$ 6.30
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HH5936—Same, 3-inch width.....	.85	8.55
HH5937—Same, 4-inch width.....	1.12	11.25



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## Issue Leaflet on Care of Premature

WASHINGTON, D. C.—The first step in preparing for the discharge of a premature infant from the hospital is for the medical, nursing and social service staff of the hospital to gain an understanding of the conditions and facilities of the home to which the child is to go and the ability of the parents to take proper care of the child.

So states the Children's Bureau in a new leaflet on hospital and home care of premature infants. An official of the bureau said in a recent interview that the leaflet would soon be distributed to all state health departments.

The leaflet outlines a plan for coordination of the work of the physician, the hospital authorities, the social service department and the community health and welfare agencies.

## Will M.A.C.'s Return to Hospitals?

An inquiry is being sent to all of the members of the Army Medical Administrative Corps in the continental United States and will perhaps be sent later to members abroad to determine whether they are interested in hospital administration when the war is over. The questionnaire asks the M.A.C. officer to outline his educational background, to list his experience that has a bearing on possible hospital work, to indicate whether he has an interest in hospital administration as a career and whether he is willing to pursue further study to prepare himself for some kind of administrative position in a hospital. Army authorities are cooperating in making the distribution and collection of the questionnaire possible.

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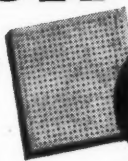
Prove it to yourself by quieting one noise source first—a diet kitchen or corridor. Acousti-Celotex, America's most widely used acoustical material, can be applied quickly and quietly to ceilings and other surfaces. It can be repeatedly painted without loss of efficiency.

The Acousti-Celotex distributor near you will be glad to consult with you. No obligation. He is sound conditioning headquarters and a member of the world's most experienced organization in this field. He guarantees results. If you cannot locate him, a note to us will bring his name and address and a new, free booklet, "The Quiet Hospital." Reading time, 8 minutes. Write The Celotex Corporation, Dept. MH-145, Chicago 3, Illinois

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## "Fortune" Analyzes Medical Care Situation

"Unfortunately, propaganda of organized medicine is often obviously mendacious," declares an article in the December issue of *Fortune*. The article refers particularly to the pamphlets distributed by the National Physicians' Committee for the Extension of Medical Services.

Speaking on the Wagner-Murray-Dingell Bill the article states, "in any case, it may reasonably be argued that the scheme tends to force doctors in by economic pressure, fails to define the

place of voluntary activities, provides for too little participation by doctors and the people served, bucks powerful traditions of decentralized control. Rather than attempt detailed management of a complicated setup, the central authority in Washington might limit itself to providing grants-in-aid to the states and localities, establishing national standards, holding the balance. Many a layman who agrees that something ought to be done is likely to remain appalled and frightened by the proposed colossus, likely to wonder if it wouldn't be better to walk toward medical security—even groping a little, and trying various

paths—rather than to leap in with both feet."

The article goes on to propose that, once doctors and hospitals are available, the foundation of a reorganized medical plan might be a network of voluntary plans for medical insurance.

"Because costs are too high under solo practice, group practice would increase," states the *Fortune* survey. It concludes that, "No complicated, flexible, voluntary compromise between the *status quo* and state medicine will have a reasonable chance of growing to meet all unmet medical needs except under two general conditions. The first is that the country be prosperous, with reasonably full employment so that the majority of the people are able to pay their own contributions without government help. Second, government at all levels, employers, the great mass of potential patients and, above all, the medical profession must show a degree of social inventiveness and a determination hitherto unknown."



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PIONEERS AND SPECIALISTS IN MECHANICAL ARTIFICIAL RESPIRATION

## Obstetrics Part of Navy Medical Service

WASHINGTON, D. C.—Obstetrics has definitely become a part of Navy medicine in the war, R/A Luther Sheldon Jr., former assistant chief, Bureau of Medicine and Surgery, U. S. Navy, said in an address before the Southern Medical Association at St. Louis.

For some years, Admiral Sheldon declared, the Navy has given such medical care as it could to the dependents of its personnel. Since the advent of the war, it has expanded the dependents' service so that out-patient and hospital care is provided whenever possible to the dependents of more than 3,000,000 men.

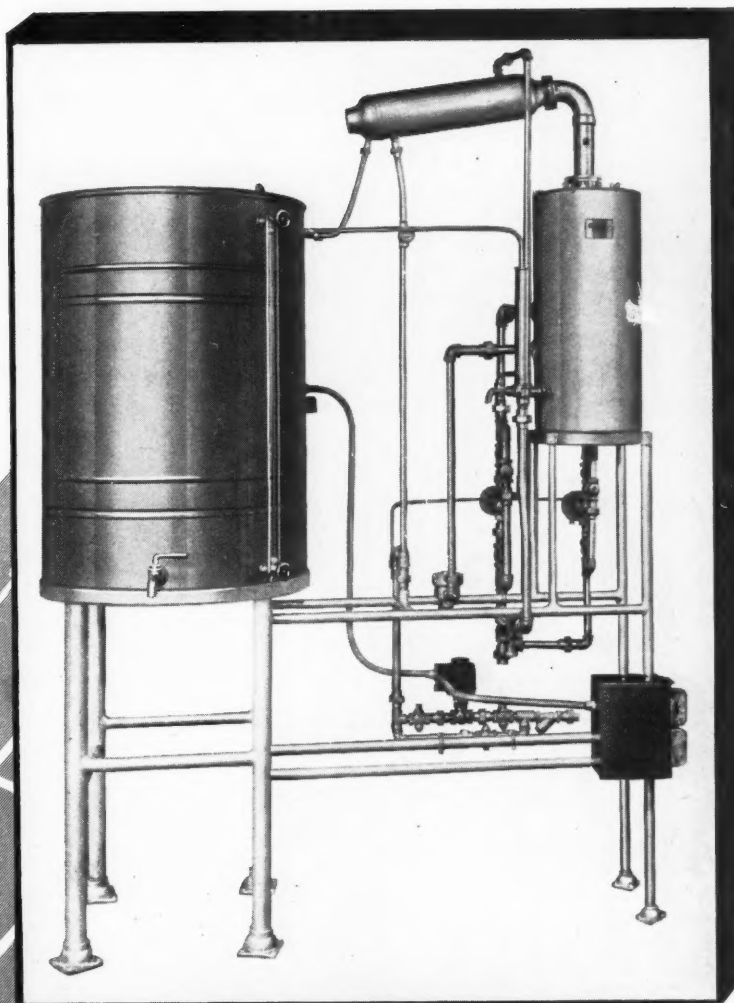
It is estimated that Navy doctors officiate at the births of between 20,000 and 30,000 Navy babies a year. Admiral Sheldon pointed out that from the morale standpoint alone, the Navy felt justified in giving such service. In addition, he said, overworked civilian physicians were relieved of an additional burden.

## Medical Service Plan to Start

Enrollment in the Missouri Medical Service is expected to start on January 15 with care provided for both medical and surgical illness in hospitals. Dues are to be 85 cents a month for single members, \$1.85 for couples and \$2.25 for families regardless of the number of dependents.

Dr. Carl F. Vohs of St. Louis, long a leader in medical economic thinking in Missouri, has been elected president of the plan. He and two of the other officers are also officers of Group Hospital Service of St. Louis.

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Without care or attention it keeps a constant supply of pure distilled water ready for regular use or for any emergency. Self-starting, self-stopping, and self-

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Be a step ahead of future needs by specifying this modern still with completely automatic controls. Whatever your distilled water requirements—from 1/2 to 500 gallons per hour—using steam, gas, or electricity, there is a Barnstead Full Automatic Unit to meet your needs.

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## Release Findings on Michigan Health Poll

Of 4968 people interviewed in a cross-section public opinion poll in the state of Michigan, 46 per cent thought that hospitals charged about the right amount; 27 per cent said hospitals charged too much, while 1 per cent felt that they did not charge enough. The remaining 26 per cent said they didn't know whether charges were too high or too low.

Asked whether they thought physicians "are as honest as they should be in all dealings with patients," 61 per cent said

"yes," 28 per cent said "no" and 11 per cent had no opinion. Of these, 18 per cent said that doctors overcharged, that they robbed people and used their profession to obtain money so that they could be socially prominent. Fifteen per cent believed that unnecessary treatments, operations and x-rays were prescribed. Eight per cent said that physicians sometimes misrepresent the truth in the interest of their patients' welfare.

Forty-one per cent of those who replied stated that they or members of their families subscribed to a medical or hospital prepayment plan. Only a few (29 per cent) were interested in extend-

ing this to dental services or to nursing service (19 per cent).

In response to the question, "Do you think we should have some sort of a government operated medical-hospital plan," 39 per cent said "yes," 43 per cent said "no" and 18 per cent were undecided. Support of a government operated plan was highest among the low income groups, in the younger age groups and among factory and semiskilled workers. More men than women favored such a plan.

Asked to choose one of several possible plans, 34 per cent favored voluntary professionally sponsored prepayment, 27 per cent preferred present private practice, 16 per cent chose a government controlled plan, 16 per cent, an insurance company plan and 1 per cent a plan controlled by labor unions.

The study was made by Foote, Cone and Belding of Chicago for the Michigan Health Council and was released on November 29.

## THE LUCK BONE SAW

### Saves Time in Surgery

Prominent surgeons and leading hospitals have been finding the Luck Bone Saw a time and labor-saver in this day of overworked medical staffs.

Its high speed makes possible the use of very small diameter slotting burrs. The lower speed, at the opposite end, is ideal for inserting Steinman Pins and Kirschner Wires, as well as for sawing bone and drilling. Variable speed is obtained by foot-controlled rheostat. Complete motor unit and cord can be sterilized in autoclave.



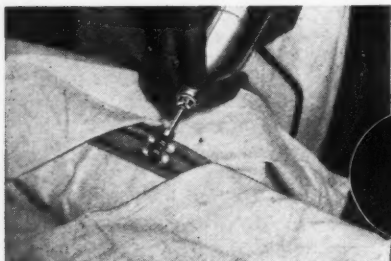
Used with cutting burr in osteoplastic procedures on smaller bones. Here a graft is being cut for fusion of metatarso-cunieform joint. The cutting burr has a multitude of uses.



The Luck Bone Saw is shown here in use with a slotting burr for transverse end cuts during removal of bone grafts. Longitudinal cuts have previously been made with circular saws.



A special shaped burr is used for curetting and saucerizing a chronic osteomyelitic focus. The same burr may be similarly employed in curetting bone cysts or benign giant cell tumors.



Used with twin circular saws. They rotate up to approximately 2000 R.P.M. Have great power. Do not jam or burn the bone. Second blade readily removed when only single blade is desired.



The Luck Bone Saw in fitted case with complete equipment.

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## New Children's Hospital Opened in Des Moines

Raymond Blank Memorial Hospital for Children in Des Moines, Iowa, was dedicated and opened to public inspection December 3. The three story building will be operated by the Iowa Methodist Hospital and is connected to the hospital by a corridor on each floor.

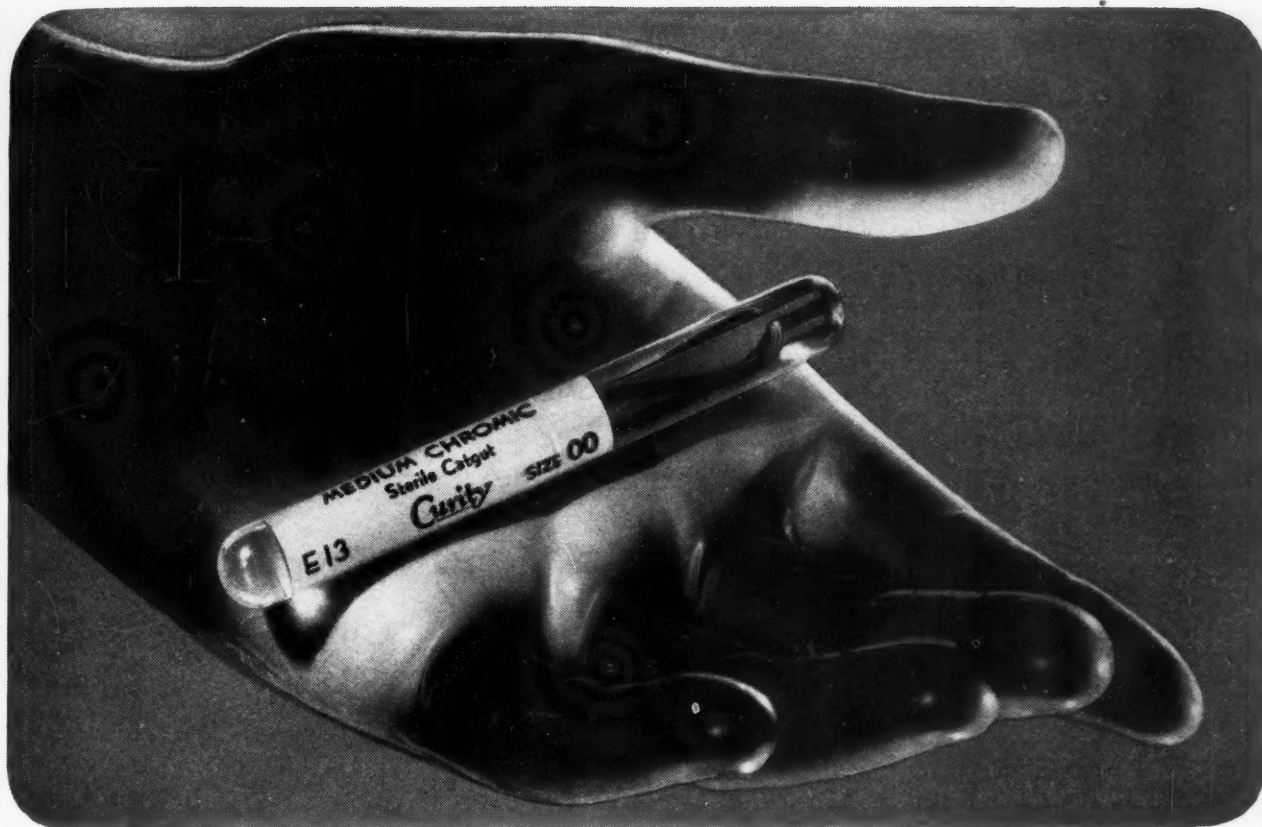
Built and equipped at a cost of \$300,000, the hospital is constructed in the shape of an arc and will have 75 or 80 beds, with accommodations for from 17 to 19 patients in a communicable disease section for the care of infantile paralysis and other communicable disease cases.

A gift of Mr. and Mrs. A. H. Blank, it is the only privately built hospital of its kind in the state. A clinic for children's diseases, tuberculosis, heart disease and child behavior, development and feeding is being planned.

## Council Reelects Haynes

Dr. Harley A. Haynes, director of University Hospital, Ann Arbor, Mich., was reelected president of the University Hospital Executives' Council at its nineteenth meeting at Wisconsin General Hospital, Madison, November 24 and 25. L. G. Schmelzer, assistant administrator of Wisconsin General Hospital, was reelected secretary-treasurer. Institutions represented at the meeting were the University of Chicago Clinics, Indiana University Medical Center, University Hospitals of the State University of Iowa, University Hospital of the University of Michigan, University of Minnesota Hospitals, Strong Memorial Hospital of the University of Rochester and Wisconsin General Hospital.





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The surgeon who sutures with a Curity Catgut strand, gives the wound the best possible assurance of uneventful healing. Curity Catgut is a suture of *balanced quality*, offering every essential characteristic in direct proportion to its importance, with no one quality developed at the expense of another.

Sterility, a first essential, is secured by processing the sutures at a temperature and for a period sufficient to destroy the most heat-resistant bacteria and spores. This sterilization cycle is carefully controlled so as to preserve *maximum strength* of the strand.

With equal care, superior performance is

insured by maintaining *the balance* of the other qualities necessary to a suture: uniform and dependable absorption... minimal tissue irritation... gauge uniformity... controlled strand surfacing that prevents abrading and facilitates secure knots... adequate tensile strength... inherent pliability.

High standards for catgut! But Curity Suture Laboratories have met them, surpassed them with a suture of superior qualities, and offer you these qualities *in balance* — for greater security of operative results in your hospital today — and every day.



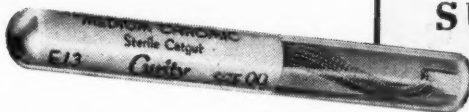
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## Agencies Plan for Veteran Rehabilitation

Vocational rehabilitation was stressed during November by statements from the War Manpower Commission, Federal Security Agency, Metropolitan Life Insurance Company and the American Medical Association.

W.M.C. announced that ten years of research by the division of occupational analysis would greatly facilitate the readjustment of veterans and war workers in the reconstruction period. This division has studied more than 100,000 jobs and prepared a series of manuals dealing

with job placement. One of the best known is the "Dictionary of Occupational Titles" defining thousands of jobs. Another analyzes physical demands and appraises physical capacities. It is especially useful in placement of disabled veterans.

More than 75,000 crippled men and women have gone on pay rolls in 1944 as a result of assistance given under the federal-state program for vocational rehabilitation, the Federal Security Agency declared.

The Metropolitan Life Insurance Company on November 2 announced a new report entitled "The Employment of the

Handicapped Veteran." Its policy-holders' service bureau declared that "the physically deficient man can excel in his job if his rehabilitation has been carefully supervised and he is employed on the basis of his remaining capabilities."

The American Medical Association pointed out on November 9 that physician veterans of this war are eligible to obtain graduate education in the postwar period under the provisions of the G.I. Bill, which provides for payment of tuition and a subsistence allowance while taking courses.

The Federal Security Agency recently announced a new series of 16 motion pictures to assist personnel directors, office supervisors and shop foremen to understand the problems of supervision. These pictures may be purchased or rented.

## MEDICHROME SLIDES

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### Include . . .

#### MA NEUROANATOMY

A series of 100 2 x 2" (35 mm.) Kodachrome transparencies (lantern slides) — Photomicrographs made from the collection of Dr. Adolph Elwyn, Columbia University, College of Physicians and Surgeons, N. Y. C.

#### MH NORMAL HISTOLOGY

A series of approximately 800 2 x 2" (35 mm.) Kodachrome photomicrographs (lantern slides) of Normal Histology.

**CREDIT**—Slides from the collections of . . .  
Dr. Ramon Castroviejo, The Eye Institute, Presbyterian Hospital, New York City.  
Dr. Moses Diamond, Columbia University College of Dentistry, New York City.  
Dr. S. R. Detwiler, College of Physicians and Surgeons, Columbia University, New York City.  
Dr. Adolph Elwyn, College of Physicians and Surgeons, Columbia University, New York City.  
Dr. S. I. Kornhauser, University of Louisville, Louisville, Ky.  
Dr. Wendell J. S. Krieg, Dept. of Anatomy, New York University College of Medicine.  
Dr. Daniel Ziskin, Columbia University College of Dentistry, New York City.

#### ME EMBRYOLOGY

A series of 16 2 x 2" Kodachrome Photomicrographs of Embryology.

#### MD DENTAL PATHOLOGY

A series of 137 2 x 2" Kodachrome projection slides, made with the cooperation of Dr. Charles G. Darlington and Dr. Oscar Miller of New York University College of Dentistry.

#### MO1 OPHTHALMOLOGY

A series of 200 2 x 2" (35 mm.) Kodachrome slides, made with the cooperation of Dr. Donald Weeks Bogart of the New York Eye and Ear Infirmary, New York City.

#### MO2 OCULAR PATHOLOGY

A series of approximately 300 2 x 2" (35 mm.) Kodachrome Photomicrographs on ocular pathology made with the cooperation of the Institute of Ophthalmology of the Presbyterian Hospital of New York City.

#### MS2 DERMATOLOGY and SYPHILOLOGY

A series of 200 2 x 2" (35 mm.) Kodachrome transparencies (lantern slides) made with the cooperation of Prof. Frank C. Combes, Dept. of Dermatology, N. Y. U. College of Medicine; Herman Goodman, M.D.; and Dept. of Health, N.Y.C., Theodore Rosenthal, M.D., Director, Bureau of Social Hygiene.

#### MS SKIN-NEVI and CANCER

A series of 64 2 x 2" Kodachrome photomicrographs of the Histopathology of Certain Nevi and Cancer. From the Registry of Derm. Pathol., Army Med. Museum, series of the American Academy of Dermatology and Syphilology. Syllabus is included with each series.

#### MT TROPICAL DISEASES

A series of approximately 150 2 x 2" (35 mm.) Kodachrome transparencies (lantern slides). **CREDIT:** Made with the cooperation of Dr. Henry E. Meleney, Dr. Harry Most and Dr. Dominic DeGiusti, Department of Preventive Medicine, New York University, College of Medicine. Slides Nos. MT15, 46, 47 are from the Army Medical Museum.

#### MS3 DERMATOLOGY

A series of 100 2 x 2" (35 mm.) Kodachrome slides on Skin Diseases made with the cooperation of Dr. George M. MacKee, Director and Dr. Charles F. Sims, Associate, New York Skin and Cancer Unit of Post-Graduate Medical School and Hospital, New York City. The classification of diseases follows the classification given in the tenth edition of Diseases of the Skin by Richard Sutton and Richard Sutton, Jr.

#### MU UROGENITAL PATHOLOGY

A series of 250 photomicrographs, photographs of gross specimens and clinical photographs being made with the cooperation of Dr. M. M. Melnick, Columbia University College of Physicians and Surgeons, Department of Urology.

#### STRUMPELL and JACOB NEUROLOGY CHARTS

A series of 21 2 x 2" (35 mm.) Kodachrome slides of the well-known Strumpell and Jacob Neurology Charts.

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## Inter-Mountain Plan Formed by Utah Group

The Inter-Mountain Hospital Service Plan was formed at the annual meeting of the Utah State Hospital Association held at Provo, Utah, on December 7. The plan began active solicitation of members on January 2.

D. O. Wright, formerly executive director of the Utah Valley Hospital Service Plan, is executive director of the new plan. Six hospitals in Utah have participated actively in the organization of the new plan.

Officers of the Utah Hospital Association were elected as follows: president, J. Howard Jenkins; vice president, Lawrence Evans, Thomas D. Dee Memorial Hospital, Ogden; secretary-treasurer, John M. Zenger.

## Vermont Plan Approved

The Supreme Court of Vermont decided that the commissioner of banking and insurance could issue a permit to the New Hampshire-Vermont Hospitalization Service to operate in Vermont and on December 2 the permit was issued. Operation in this state had been held up by a suit filed by a small insurance company in Rutland to prevent the nonprofit plan from being permitted to operate. This commercial company has now sued to prevent the plan from using the Blue Cross insignia. Vermont became the forty-third state to have a Blue Cross plan.

## Chicago Hospital Reopens

Burnside Hospital Association in Chicago has reopened as a convalescent and rest home. Previously operated as a general hospital, it was forced to close last March because of conditions resulting from the war.



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## Wayne University Reveals Plans for Medical Center

The first step in the fund-raising campaign for the Medical Science Center of Wayne University, Detroit, was announced recently by the board of directors of the center, with the appointment of Wendell W. Anderson, president of the center, as chairman of the fund-raising campaign. It is hoped to raise \$10,000,000 in the first cycle.

This sum is to provide a hall of medical science to house Wayne University College of Medicine, the College of Pharmacy, the School of Mortuary Science and similar schools. It will also provide a university hospital, full facilities for a college of nursing and a combined powerhouse, laundry and service building.

Eventual goal of the medical center campaign is \$50,000,000 of which \$20,000,000 will be for construction and equipment and \$30,000,000 for endowment. A 53 acre site has been approved by the City Plan Commission and condemnation proceedings have already started.

## Kansas City Hospital Campaigns for Funds

A campaign for \$750,000 for immediate and postwar expansion of St. Luke's Hospital, Kansas City, Mo., was started on December 11. The campaign is designed to provide a new nurses' home, thus permitting the conversion of the present home into a convalescent hospital. A grant of \$393,360 and a loan of \$123,000 from Lanham Act funds have already been approved for the nurses' home and conversion program.

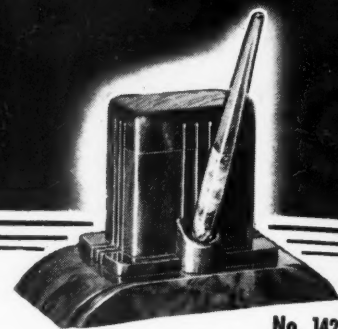
As a part of the postwar planning a north wing is to be added to the hospital at an additional cost of \$600,000. This amount is included in the present campaign. In the more distant future the hospital is planning a new women's and children's building, a psychiatric building, an isolation building and a building for physicians' private offices. Thus, eventually, St. Luke's would reach 600 bed capacity.

There is reported to be a shortage of 1000 beds in general hospitals in Kansas City.

## Building Fund Over Top

The building fund of the Genesee Memorial Hospital at Batavia, N. Y., has raised \$400,000 for a new 100 bed hospital to be constructed after the war. The sum far surpasses the original goal. The Genesee Hospital, formerly called the Women's Hospital, is dedicated as a war memorial to the men and women who served in the present war.

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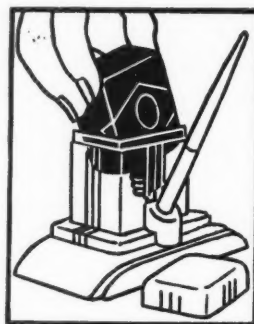
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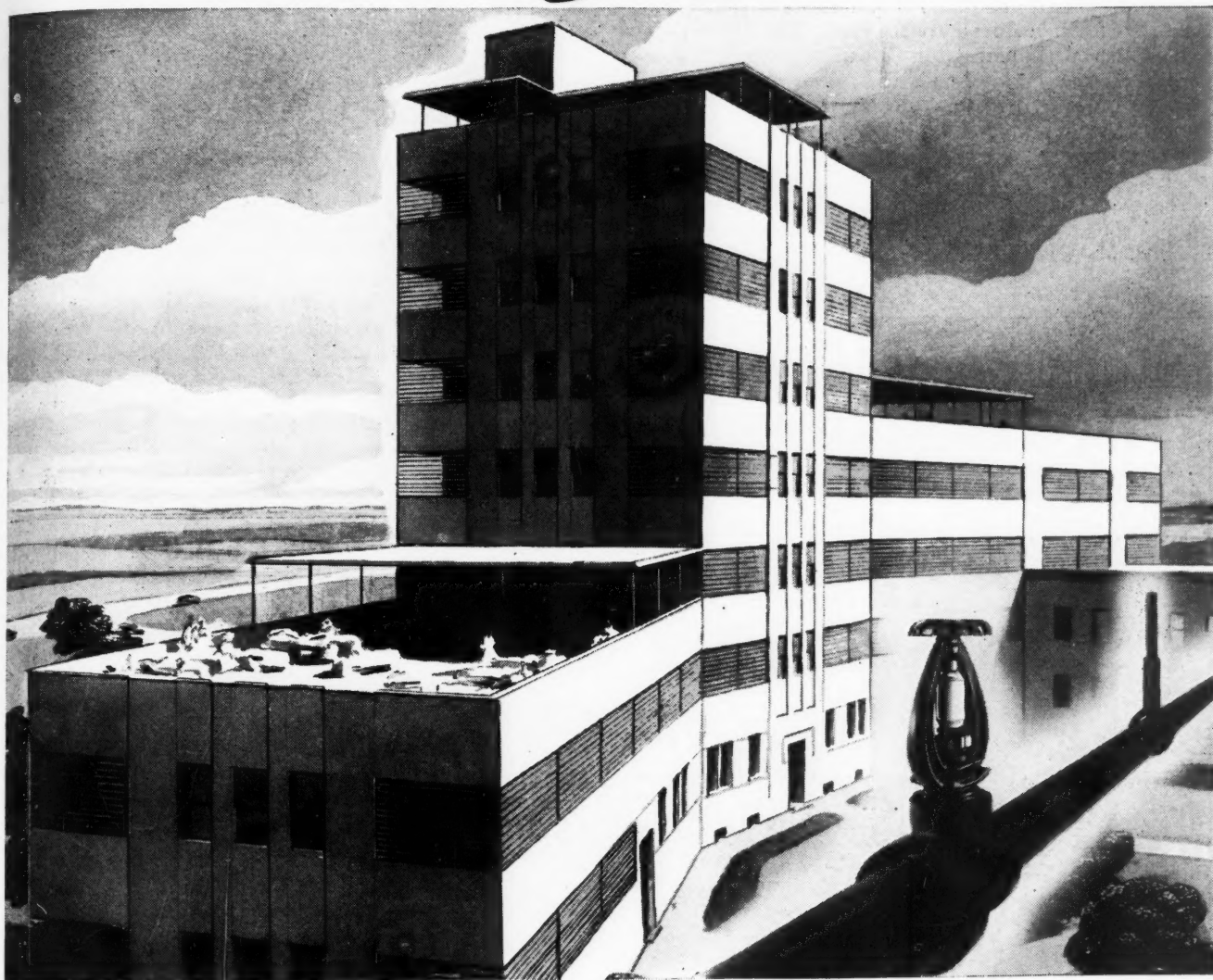
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### Fire Protection



## British Hospitals Report on Activities

Three unusual reports were received in Chicago during November. The first is entitled, "Citizen of Empire" and is the thirty-fifth annual report of the Children's Hospital, Winnipeg. It is dedicated to the memory of Annie A. Bond who was the first president of the board of the hospital in 1909 and 1910 and was first honorary president from 1924 to 1943.

The second unusual annual report is from Christie Hospital and Holt Radium Institute, Manchester England. Christie

Hospital is the largest cancer institution in the British Empire. The report is presented in two versions, one a full report with all important statistics and the other an abridged copy with the main text intact but the statistics in summary only. The latter is used for appeal purposes and contains forms for bequests and donations.

An unusual feature of the report is a description of a visit to Australia by Dr. Ralston Paterson, director of the Holt Radium Institute, to advise the Australian states on their cancer services which will probably follow closely on the lines pioneered by the Christie Hospital. "It

is becoming increasingly apparent," Doctor Paterson reports, "that the secret of success is the creation of centralized organizations serving wide areas from a single center, as this hospital has done in Lancashire for so many years."

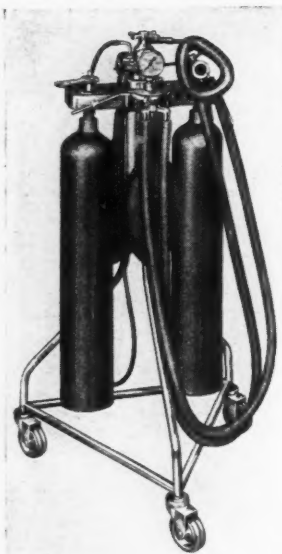
Similar arrangements are planned for New South Wales and Victoria, he reports, and the cancer services of general hospitals in these states will be fused into large specialized cancer hospitals. In research facilities the new Australian hospitals will probably excel the Christie Hospital, he states, and they will be located near the universities.

Clinic services throughout the smaller cities of the states will be provided and, after the war, will probably be served by airplane because of the great distances.

In Queensland, a special wing of the Brisbane General Hospital is to be devoted to cancer and will serve an area of up to 1000 miles from Brisbane.

The third annual report covers the 1943 work of the Merseyside Hospitals Council, Inc., Liverpool, England, which during the year collected a record total of £397,454, an increase of £26,773 over 1942. In addition to its grants to voluntary and other hospitals, the council made substantial payments for convalescent home service, home nursing, help and equipment and ambulance transport. Among the other services, the council distributed clothing, bedding and foodstuffs sent by friends in Canada through its after-care department to sufferers from air raids. It also was of assistance to foreigners passing through the port of Liverpool.

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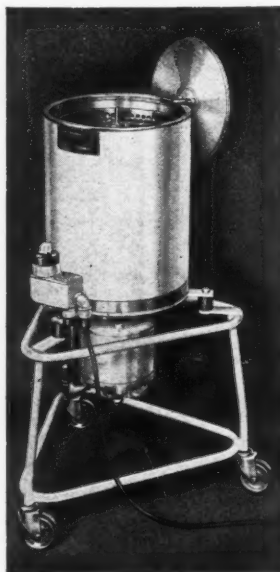
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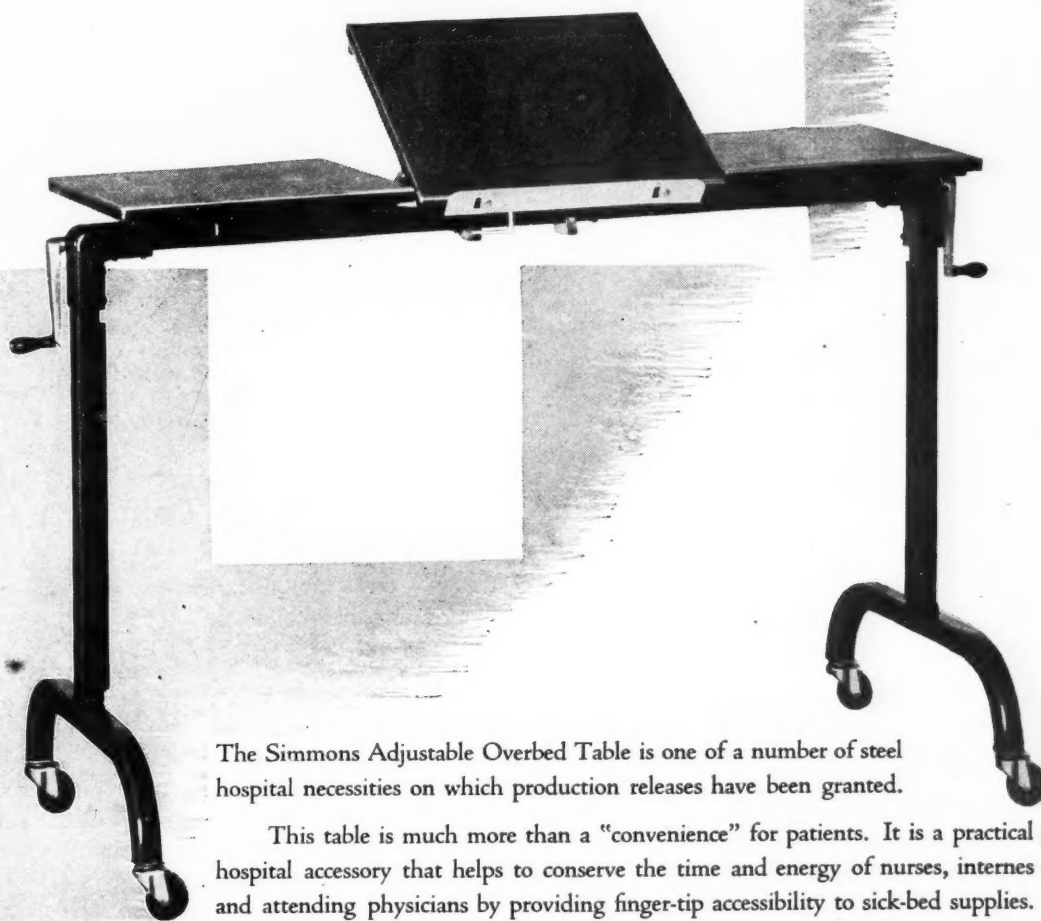
## Coming Meetings

- Jan. 18—Wisconsin Hospital Association, Hotel Schroeder, Milwaukee.
- Jan. 22-26—American College of Hospital Administrators, Educational Conference for Members, University of Minnesota.
- Jan. 25-26—Southwide Baptist Hospital Association, Baptist Memorial Hospital, Memphis, Tenn.
- February. 15-16—National Association of Methodist Hospitals and Homes, Jefferson Hotel, St. Louis.
- March 12-14—New England Hospital Assembly, Hotel Statler, Boston.
- April 4—Washington State Hospital Association, King County Hospital, Seattle.
- April 4-5—Southeastern Hospital Conference, Memphis.
- April 12-13—Texas Hospital Association, Galveston.
- April 18-20—Hospital Association of Pennsylvania, Bellevue Stratford Hotel, Philadelphia.
- April 25-27—Carolinas-Virginias Hospital Association, Greenville, S. C.
- April 26-27—Kentucky Hospital Association, Brown Hotel, Louisville.
- May 2-4—Tri-State Hospital Assembly, Palmer House, Chicago.
- May 23-25—Hospital Association of New York State, Hotel Pennsylvania, New York City.
- June 18-22—American Medical Association, Philadelphia.
- June 18-23—Catholic Hospital Association, Milwaukee.
- Oct. 15-19—American Dietetic Association, Netherland-Plaza Hotel, Cincinnati.



# Welcome News...

## STEEL HOSPITAL FURNITURE AGAIN AVAILABLE!



The Simmons Adjustable Overbed Table is one of a number of steel hospital necessities on which production releases have been granted.

This table is much more than a "convenience" for patients. It is a practical hospital accessory that helps to conserve the time and energy of nurses, internes and attending physicians by providing finger-tip accessibility to sick-bed supplies.

End cranks provide quick, convenient adjustment of table to any desired height from 31 to 47½ inches. Three-section linoleum-covered top has tilting center section. Top dimensions, overall: 14 x 48 in. Center section: 14 x 16 in. Equipped with rubber casters. Strongly built of pressed steel, finished in walnut.

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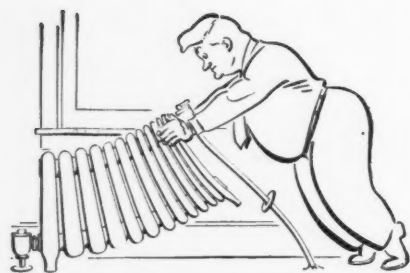
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Webster Engineers have discovered through surveys of thousands of buildings that seven out of ten large buildings in America (many less than ten years old) can get up to 33% more heat from the fuel consumed.

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## St. Louis Group Will Build Hospital

The Faith Hospital Association has bought a two acre site on Kingshighway in St. Louis and will erect a three unit hospital at the end of the war.

The units will be separated into divisions for acute medical and surgical cases, convalescent patients and maternity cases. Capacity of the hospital will be 110 beds with provisions for future expansion.

Dr. Andrew J. Signorelli, director of the Faith Hospital Association, said the arrangement would enable acutely ill ward patients to receive more personal attention while those in the convalescent ward would be better able to care for themselves, thus effecting financial savings.

The entire structure will be air conditioned the year around. Radiant heating will be an integral part of the floor construction and unusually large window areas will admit a maximum of sunlight.

Joseph D. Murphy and Angelo G. Corrubia are the architects.

## Doctor Smelzer Honored

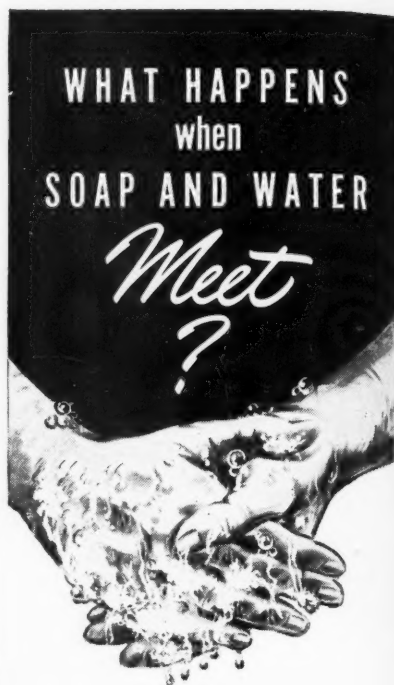
A testimonial dinner for Dr. Donald E. Smelzer, new president of the American Hospital Association, was given on November 14 by the board of trustees of the Hospital Association of Pennsylvania, in Philadelphia. More than 30 persons attended, including two past presidents of the A.H.A. living in Pennsylvania, Dr. Joseph C. Doane and Dr. Robin C. Buerki. Doctor Doane was toastmaster.

## Education on Alcoholism

The national Committee for Education on Alcoholism was formed recently to assist in community control of alcoholism through lectures, literature, aid in organizing local committees, suggestions regarding programs of action, advice on clinics and information centers, personnel training and expert consultations. The committee's office is in the New York Academy of Medicine, with Mrs. Marty Mann as executive director. A series of popular booklets of 16 pages each, as well as a series of technical books, is being issued.

## N. Y. Fund Raises \$4,620,275

The Greater New York Fund has passed this year's financial goal by raising \$4,620,275, which is \$286,252 more than the total contributions of 1943. The campaign was conducted among business concerns and employe groups in behalf of 408 local hospitals, health and welfare agencies.



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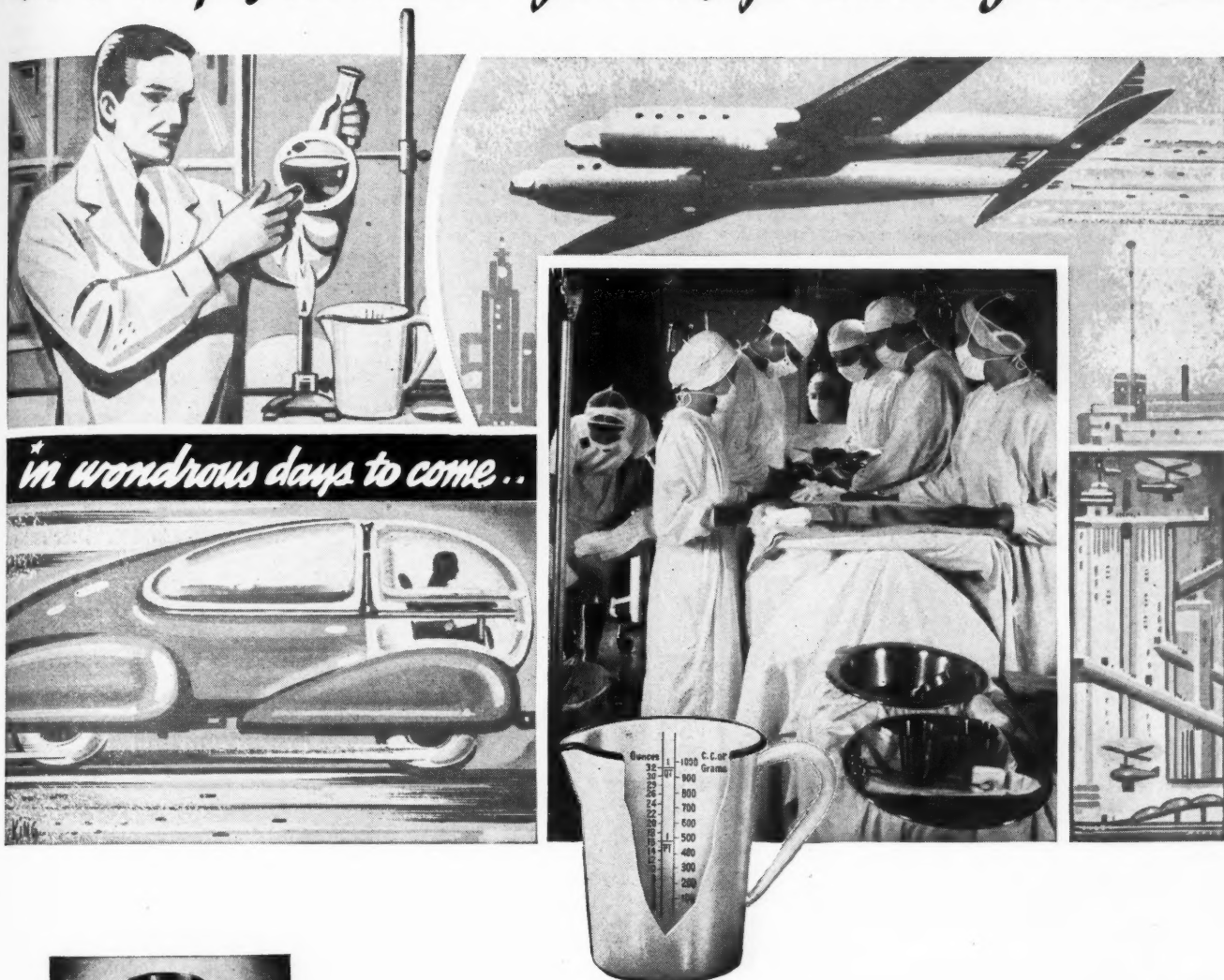
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## OFFICIAL ORDERS

November 15 to December 15

**Butter.**—If a hospital is unable to purchase set-aside butter with a certificate issued by W.F.A., the certificate should be returned to the regional War Food Administration office. There is no assurance that there will always be butter available to redeem the certificates because of the extreme shortages of available set-aside stocks and the heavy demand by the armed forces and the War Food Administration to meet allocated requirements through February 1945.

**Camphor.**—To assure an equitable distribution of synthetic camphor, in view of heavy military requirements, W.P.B. on November 28 placed it under the control of Schedule 75 of order M-300. It is used in the manufacture of pharmaceuti-

cals, as well as explosives and plastics. About 50 per cent of civilian requests will be granted, W.P.B. stated.

**Construction.**—Interpretations 11 and 12 were issued December 2 to the construction order, L-41. Interpretation 11 clarified provisions governing building alterations that may be made in connection with installations of machinery or equipment permitted under Direction 2 of the order. Alterations which can be made without W.P.B. consent are only such as are directly required in connection with the installation or operation of the machinery or equipment being installed. For example, new walls or partitions may be put in where required for the operation of the machinery or equipment, but the installation of offices, office partitions, storage rooms and toilets is not permitted except by specific W.P.B. approval.

Interpretation 12 clarified provisions of L-41 that deal with the annual cost limits under which construction may be performed without

W.P.B. permission. According to the interpretation, the exemption applies only to jobs having a total cost within the annual allowance granted for the various types of construction permitted under the order.

**Drugs.**—Individual manufacturers of low-priced packaged drugs, who are suffering hardship, may apply to O.P.A. for adjustment of present ceiling prices, it was announced December 2. The adjusted price will not be higher than the selling price of the next higher competitive seller of the same or an equivalent product.

**Feathers.**—The waterfowl feathers order which prohibits the use of new goose and duck feathers other than wing and tail feathers over 3 inches in length, except to fill military or specifically authorized orders, was amended December 7 to extend the restrictions to all such feathers up to and including 4 inches in length, including mixtures of such new feathers with used feathers. The order is further amended to include medical pillows as contracted for by the Army or Navy among the permitted uses for the restricted feathers.

**Flashlight Batteries.**—An original lot of more than 20,000,000 Signal Corps flashlight batteries declared surplus will be sold by the government to civilians at a retail ceiling price of 10 cents each, O.P.A. announced December 1.

**Insect Wire Cloth.**—There is a shortage of insect wire screen cloth, W.P.B. reported December 12. Civilian requirements for screen cloth have been cut drastically because of the military demand.

**Oil.**—Transportation conditions make it necessary that East Coast rations of residual oil for heating again must be figured on the original basis of two thirds of normal requirements, O.P.A. announced on December 15. This action will not apply to the Middle West. This provision will not affect consumers who have already received additional rations. Others may apply for "hardship" rations.

**Rattan.**—Restrictions on the sale of rattan have been modified to permit its sale to the Veterans Administration for use in occupational therapy and to manufacturers of wheel chairs for Army, Navy and Veterans' hospitals, W.P.B. announced December 1.

**Rubber Thread.**—The rubber yarn and elastic thread order, M-124, has been amended to permit the direct sale or delivery of natural rubber thread produced after Jan. 1, 1945, on orders of the Army, Navy, U. S. Maritime Commission, War Shipping Administration or the Veterans Administration. The amendment also provides a program for granting preference ratings to obtain synthetic rubber thread for the manufacture of a specified list of items of safety equipment and elastic health and surgical equipment.

**Sheeting.**—Methods by which hospitals may receive W.P.B. aid in obtaining critical Class A and B sheetings were announced December 4. To implement Direction 6 to M-317, the Government Bureau of O.C.R. will allocate Class A and B sheetings for the essential needs of hospitals and other institutions. The allocated fabrics will be used to provide gowns and uniforms, orthopedic equipment, cover cloth for laundry presses, fire protection items, garments for food handlers, aprons and many other needs.

**Vacuum Cleaners.**—W.P.B. officials advised manufacturers of domestic vacuum cleaners to take advantage of W.P.B. orders and regulations designed to aid manufacturers in preparing for reconversion: Priorities Regulation 23, authorizing the development of experimental models for postwar production, and Priorities Regulation 24, authorizing the purchase on unrated orders of machine tools, fixtures and similar equipment.

# Specify

## COUCH WITH CONFIDENCE

Locking Button	Magnetic	Pull Cord	Type	Single Cord or Button	Double Cord or Button	With Emerg. Pilot	With Duplex Switch Recept.	Symbol
BL11	MT11	PC11	Private Room	X				●— —●
BL11E	MT11E	PC11E	Room	X				●— —●
MT21			COMPOSITE HOSPITAL AND NURSES HOME FLOOR PLAN	X				●— —●
MT21E			SHOWING LOCATION OF SYMBOLS FOR THE FOLLOWING SYSTEMS:—	X				●— —●
BL12			NURSES CALL					●— —●
BL12E			DOCTORS PAGING					●— —●
MT22			DOCTORS REGISTER					●— —●
MT22E			FIRE ALARM					●— —●
BL2			PRIVATE TELEPHONE					●— —●
BL2E			ENTRANCE ANNUNCIATOR					●— —●
PC1			NURSES HOME RETURN CALL					●— —●
MT12			DOCTORS ENTRANCE					●— —●
MT12E			AMBULANCE ENTRANCE					●— —●
BL31			ACCIDENT					●— —●
BL31E			ISOLATION (CONTAGIOUS)					●— —●
VP1			USE THESE SYMBOLS FOR CONTAGIOUS SECTIONS					●— —●
BL41			DOCTORS ENTRANCE					●— —●
BL42			AMBULANCE ENTRANCE					●— —●
PS1			ACCIDENT					●— —●
			ISOLATION (CONTAGIOUS)					●— —●
			USE THESE SYMBOLS FOR CONTAGIOUS SECTIONS					●— —●

### ARCHITECT'S SPECIFICATIONS

**GENERAL:** The electrical contractor shall furnish and install a complete Nurses' Call Signal System including all calling stations, corridor lights, duty station annunciators, supervisory annunciators, transformers, conduits, outlet boxes, wiring and any other materials required all as shown on the plans and as hereinafter specified.

**OPERATION:** The operation of a calling station shall light its associated corridor light, duty station annunciator and supervisory annunciator and shall momentarily sound buzzers at any annunciator stations so equipped while the patient is actually pressing the button (or pulling the cord). This audible signal may be repeated at will by the patient. Calls may be cancelled only at the initiating station. If a number of calls originate in one section during one specified period all pilot lights common to all stations shall remain lighted until all calls have been answered and all stations reset.

WRITE FOR COPY OF NEW CATALOG ON  
HOSPITAL SIGNAL SYSTEMS

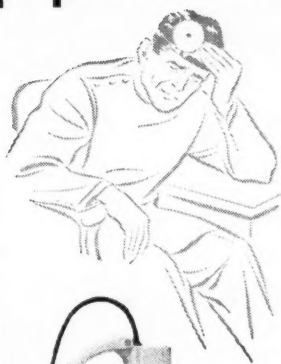
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### Build Additions to Hospital

Contracts have been awarded for a new power plant and for additions and alterations of the main building at the George F. Geisinger Memorial Hospital, Danville, Pa. Bed capacity in the maternity department will be increased from 20 to 37 and infant bassinet capacity from 20 to 35. In addition, the hospital is in the process of completing expansion of its nurses' home.

# Let This ENT Equipment Conserve Your Specialists' Energy



The precious skill of the busy specialist deserves the working ease of a Ritter Ear-Nose-and-Throat Unit. Designed to the specifications of prominent ENT specialists, this unit is made-to-order for hospital treatment. Relaxed on the Ritter Rest-and-Relief Stool, he adjusts his patient comfortably in the Ritter Motor Chair and selects his instruments and medicaments—all within arm's reach. Until you have seen the smooth effortless operation of the Ritter ENT Unit, you do not realize how much waste motion it can save the doctor—how it speeds up patient appointments. *Ritter Company, Inc., Ritter Park, Rochester 3, New York.*



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## Two Hospitals Combine

Margaret Pillsbury Hospital and Memorial Hospital at Concord, N. H., were incorporated as the Concord Hospital by the trustees of the two institutions, who are making plans for a single general hospital and health center on a new site. The two existing hospitals will be disposed of for other purposes. The proposed new hospital will be the largest general hospital in the state with at least 200 beds for in-patients at its opening. It will cost about \$1,500,000 but will not be built before the end of the war.

## Advise Grounding Equipment

The grounding of equipment in hospital operating rooms, including motors, lamps, fixtures, cabinets and conduits, is recommended by the conference committee on operating room hazards of the National Fire Protection Association in a recent report entitled, "Combustible Anesthetics in Hospital Operating Rooms." The committee recommends flooring in the operating room that will provide an electrically conductive path with a resistance of not more than 250,000 ohms. It recommends that mattresses and pads be fabricated from conductive rubber sheeting or similar material. In certain areas other means of intercoupling are recommended.

## Texas Votes to Aid Hospitals

Texas voted in November by more than two to one to amend its constitution so that counties so desiring could have a special election to authorize the judges and county commissioners to reallocate tax funds, thus permitting adequate operating budgets for county hospitals. It is planned in the spring to submit to the voters of Dallas County a proposition to empower these officials to increase the budget for the Dallas City-County Hospital System.

If this move is successful, the Dallas City-County Hospital System will be ready for a large bond issue for a new hospital construction program. The project was illustrated in *The Modern Hospital* of March 1944.

## Guard Against Boric Acid

Following the deaths in September of two new-born babies at Highland Park Hospital, Highland Park, Ill., who were mistakenly given boric acid, hospitals in Illinois have been requested to remove boric acid from their maternity wards. The request was made by Dr. Roland R. Cross, state director of public health, who pointed out that boric acid is of doubtful antiseptic value and is "a powerful poison" when swallowed by infants.

## Shull Heads Colorado Group

Proposed changes in Colorado public health legislation were discussed at the twentieth annual meeting of the Colorado Hospital Association held December 13 in Denver. John C. Shull of Porter Sanitarium and Hospital, Denver, was elected president of the association. Roy R. Prangle of the University of Colorado School of Medicine was elected vice president; Sister Mary Thomas of Mercy Hospital, Denver, treasurer, and Dr. B. B. Jaffa, Denver, executive secretary.

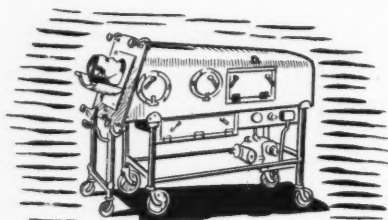
## Plan Michigan Hospital

Plans are being made to finance and build a 300 bed hospital at Royal Oak, Mich., for southern Oakland County by the Southern Oakland Hospital Association. Dr. Charles Edward Remy is consultant on the project and Clair W. Dichty of Detroit will be the architect. The fund-raising campaign will be handled by Ketchum, Inc., of Pittsburgh.

## Easter Seal Sale Announced

A nationwide study to gather data on the problem of convalescent care is one of the activities to be financed by the sale of Easter seals to be held next year from March 1 to April 1 under the sponsorship of the National Society for Crippled Children.

# CONSTANT COMPANION



*of the Iron Lung  
in "Polio" Therapy*

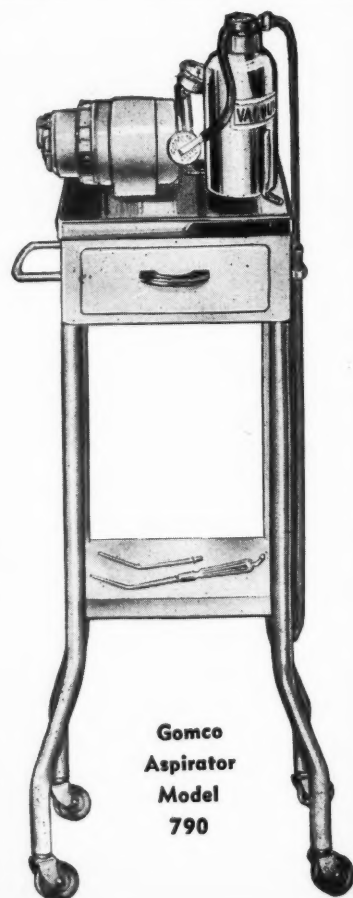
Standing on guard beside "iron lungs," dependable, fast-acting GOMCO Aspirators have been rendering invaluable service in scores of poliomyelitis cases. Ready for instant use when paralysis involves the swallowing reflex, with accumulated secretions threatening strangulation and suffocation, the Gomco Aspirator

rapidly, yet gently, removes such obstacles to respiration.

Gomco Aspirators are modernly designed, easy to operate, with Safety Overflow Valve to prevent damage to pump from over-filled suction bottle. Details of construction and operation on request.

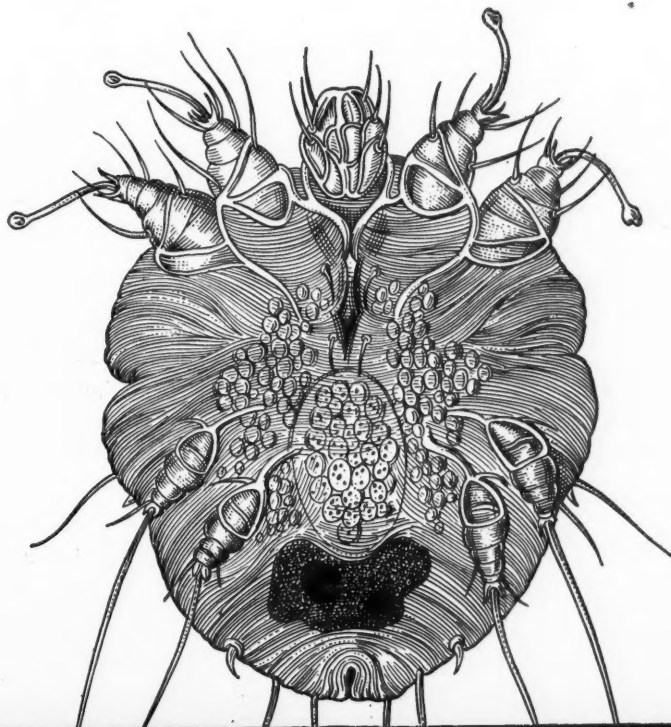
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# GOMCO ASPIRATOR



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Aspirator  
Model  
790





## ***A NEW effective treatment for Scabies***

No longer are slow, greasy ointments with their attendant messiness necessary to treat scabies. In their stead has come quick, easily applied, highly parasiticidal benzyl benzoate emulsion. . . . Writes Mackenzie<sup>1</sup>: "The ease and speed with which the application can be carried out . . . rapidity of cure, and the almost immediate relief from itching combine to make it a satisfactory remedy from both the clinical and the public health aspects."

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Application: Following a thorough soap and water bath, the emulsion (diluted to 25%) is painted on the entire body, allowed to dry, and then reapplied. A warm bath, 24 hours later, completes the treatment.

Bottles of 4 fluid ounces and ½ gallon

1. Mackenzie, I. F.: Brit. M. J. 2:403, 1941.



Literature on request

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Vol. 64, No. 1, January 1945

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### Form Health Committee

To help meet the postwar health needs of Europe's war victims, the American Jewish Joint Distribution Committee of New York has announced the formation of a Committee on Health, Nutrition and Medical Service. The singling out of Jews in the German extermination program has made their health problems of a serious nature and the formation of the committee is the first step in meeting their need. Dr. Jacob J. Golub, director of the Hospital for Joint Diseases, New York City, was named chairman. Doctor Golub was a member of a similar commission sent abroad after the last war by the joint distribution committee.

### To Train Psychiatric Nurses

Beginning February 8, Western Reserve University, Cleveland, will offer an advanced program in psychiatric nursing for graduate registered nurses who have had sufficient experience in psychiatric nursing to indicate adaptability in this field. Designed to cover a minimum of two semesters of full-time study, the program is presented through the Frances Payne Bolton School of Nursing in Cleveland in affiliation with the Toledo State Hospital School of Nursing where clinical psychiatric nursing practice will be offered.

### Offers Music Therapy Course

Evidence of the growing attention to music in therapy is revealed by the announcement of Michigan State College, East Lansing, of a four year course on the subject. According to Roy Underwood, director of the musical department, the first purpose is "to meet the great demand for musicians who can speak the language of the psychiatrist and who can mix the musical ingredients prescribed by him and, second, to open up a new professional field for the many intelligent and talented musicians who do not care to teach or to take their chances in an overcrowded concert field." The college work is to be followed by a three months' internship at Eloise Hospital, Eloise, Mich., under the personal supervision of Dr. Ira M. Alshuler.

### Hospital Burns Mortgages

In a public celebration held recently, Presque Isle General Hospital, Presque Isle, Me., burned the mortgages on the hospital and nurses' residence, marking the end of a twenty-five year struggle to make the hospital community owned and debt free. A total of \$25,395.56 was raised in a three month campaign to meet the foreclosure deadline, with an extra \$5,489.25 raised to be used for needed improvements.

### Cleveland Drive Successful

A complete report on the one month intensive individual enrollment campaign of the Cleveland Hospital Service Association was issued during December by Michael A. Kelly, associate director. The campaign was carried on with the cooperation of the *Cleveland Press*. A total of 7602 new members was enrolled as individuals and about 2500 additional were enrolled in employed groups of from five to 10 employees. In addition there was a great increase in interest in the groups with 10 or more employees but the net amount of this increase will not be known until all such groups have been canvassed.

### Impostor Swindles Nurses

An impostor has been swindling nurses in various parts of the United States, the Better Business Bureau of Houston, Tex., has reported, according to a letter from Robert Jolly of Memorial Hospital. The man uses the name of Leman Garth Oler and represents that he is connected with the Quality Garment Company of Houston. He takes orders for uniforms, using order blanks of this company and promises delivery in sixty days. He then collects for the uniforms and disappears. He was employed by this company but left last April. The authorities are now trying to locate him.

## QUICAPS DISPOSABLE NURSING BOTTLE CLOSURES



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## ABOUT PEOPLE

(Continued From Page 81)

for Convalescing Children at Omaha, Neb. **Mary Nellie Curen**, a graduate of the University of Nebraska School of Nursing, will be her assistant.

**Elizabeth Williams** has been appointed superintendent of City Hospital, Fostoria, Ohio.

**Mrs. E. Turek** has been named to succeed **Mrs. A. T. Woodburn** as the superintendent of North Plains Hospital, Borger, Tex.

**Dr. E. W. Burnett** has been chosen as superintendent of Rusk State Hospital, Rusk, Tex. He replaces **Dr. David Wade**.

**Gladys L. Page, R.N.**, has become superintendent of Hardwick Hospital, Hardwick, Vt., succeeding **Elsie Underwood**.

**Clarence L. Murphy**, who was formerly associated with Philadelphia State Hospital, Philadelphia, is the new administrator at Maple Avenue Hospital, Du Bois, Pa.

**Coral M. Page** has been appointed superintendent of Waynesboro Community Hospital, Waynesboro, Va. Miss Page was formerly administrator of Memorial Hospital, Piqua, Ohio.

## Department Heads

**Leora Simpson, R.N.**, director of the Oklahoma Baptist Hospital School of Nursing, Muskogee, Okla., has been appointed a member of the state board of nurse examiners.

## Miscellaneous

**Evelyn Johnson**, formerly of the American Hospital Association and the office of Charles Remy, hospital consultant, Chicago, is serving as acting executive secretary of the Chicago Hospital Council.

**Leo F. Godley** has been appointed chief pharmacist and instructor of therapeutics at New York University College of Medicine, New York City.

**Dr. Paul W. Butterfield**, former associate professor of pathology at the University of Vermont Medical School, Burlington, has been appointed pathologist at Washington County Hospital, Hagerstown, Md.

**Bernard S. Coleman**, secretary of the tuberculosis committee of the New York Tuberculosis and Health Association and of the Tuberculosis Sanatorium Conference of Metropolitan New York since 1934, is resigning to become director of the Council of National Jewish Tuberculosis Institutions, Denver.

**Nora G. Zaik** of Worcester, Mass., is now on the staff of the hospital at the

leper colony, Kalaupapa, Molokai, T. H. Miss **Zaik** went to Hawaii in 1942 with a group of Red Cross nurses to work in emergency civilian hospitals set up after Pearl Harbor. The Red Cross unit, which worked under the direction of the Office of Civilian Defense in Hawaii, has been disbanded, but many of the nurses have remained to work on the islands.

**Maj. Mary C. Walker**, director of the senior cadet nurse program in Army hospitals, has received an honorary degree in humane letters from the University of Denver. She is the first member of the Army nurse corps to receive the degree.

**Dr. Robert P. Fischelis**, director of the division of chemicals, drugs and health supplies of the War Production Board, has been elected secretary and general manager of the American Pharmaceutical Association.

## Deaths

**Mother Superior Claver**, superintendent of Mother Cabrini Memorial Hospital, Chicago, died December 16 from a heart attack. Sister Claver came to the United States from Italy in 1894 and was Superior at the Sacred Heart Orphanage in West Park, N. Y. She spent several years in Europe and returned in 1930 when she was appointed Mother Superior at Mother Cabrini Hospital.

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